June, 1943

50 Cents

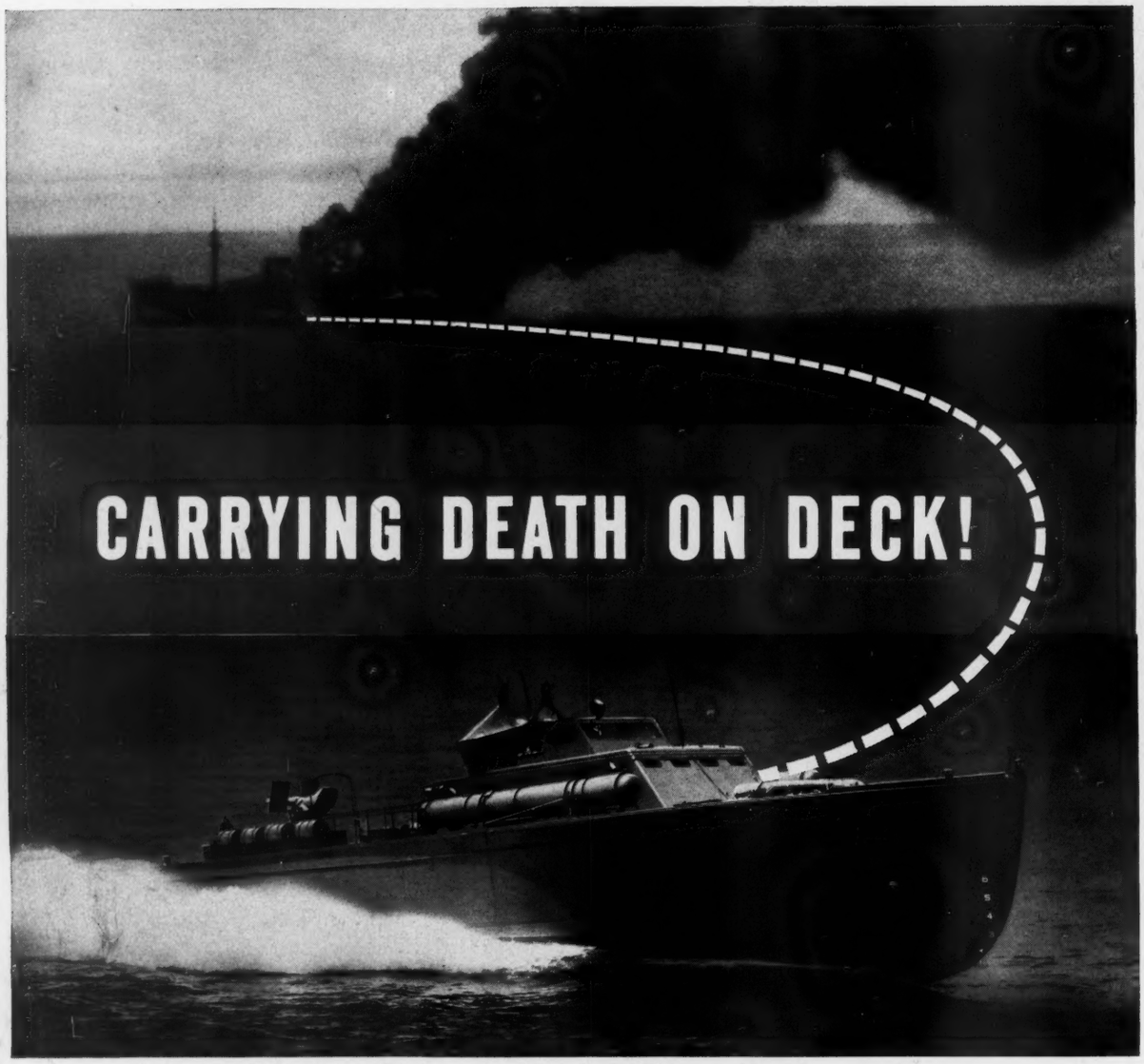
Periodical

Yachting

PUBLIC LIBRARY
JUN 2 1943
DETROIT

FEATURES IN THIS ISSUE

RUNNING A YACHT CLUB IN WARTIME . . . . . *By Jasper M. Rowland*
LIFE BOAT PASSAGE . . . . . *By George G. Breed*
TWENTY YEARS OF YACHT DEVELOPMENT . . . . . *By Herbert L. Stone*



Powerful Huckins-built 80-ft. PT Boat equipped with death-dealing torpedoes, ash cans, machine guns, etc.

BLAZING fiercely, this Jap ship has been stung to death by the tin-fish from an American PT Boat.

Thousands of PT Boats and other tough, gray-painted small craft used by our Armed Forces . . . together with boats operated by civilians . . . are securing efficient, faultless engine performance by using Texaco.

Texaco Marine Motor Oil keeps your engines clean — free from gum, sludge and harmful carbon deposits.

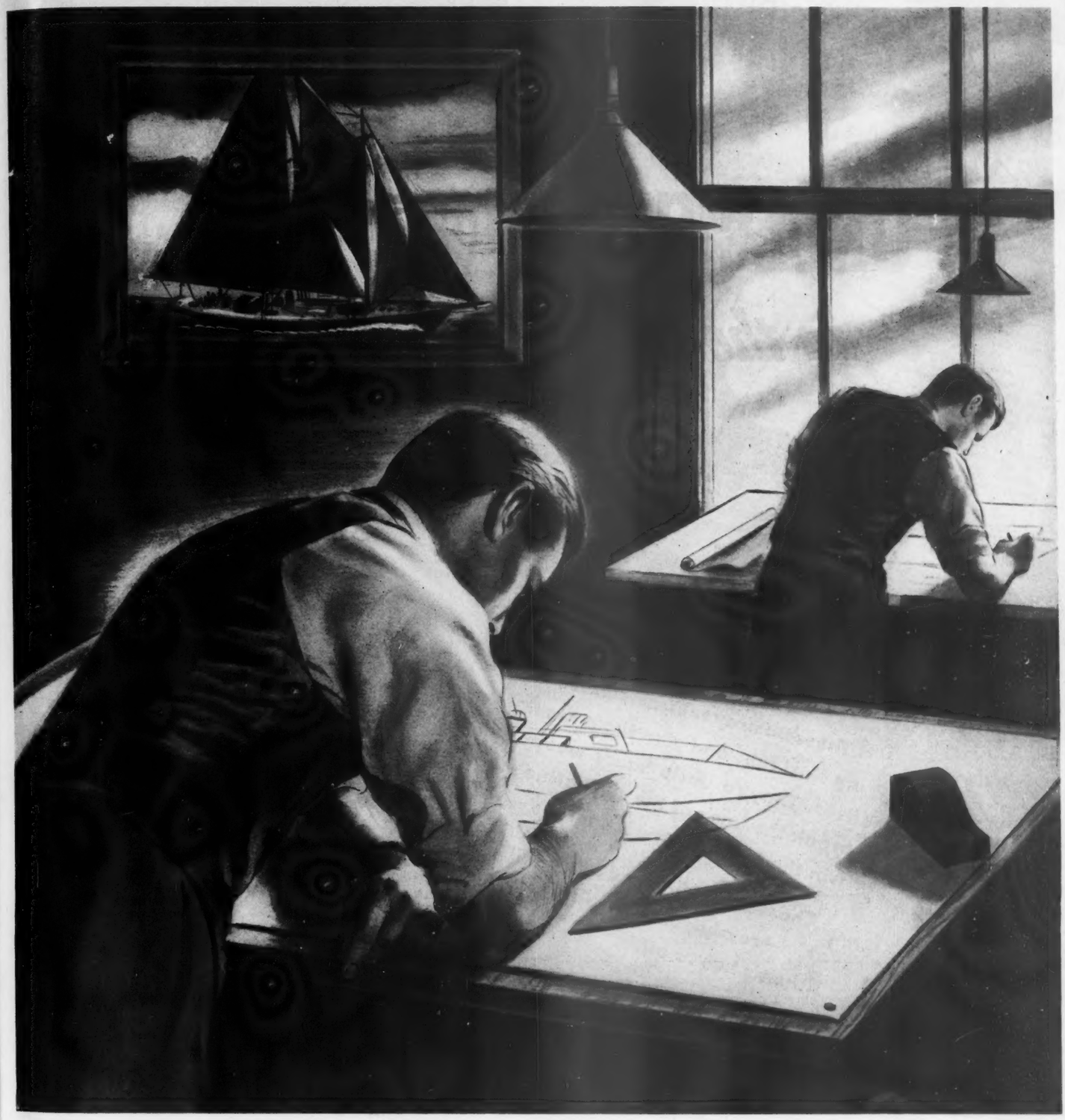
Texaco marine lubricants are used by many leading boat and engine builders to break-in motors and conduct trial runs. They are also used by the U. S. Army, Navy, Coast Guard, U. S. Engineers, and by a majority of steamship companies operating cargo vessels for the War Shipping Administration.

You will find Texaco Waterfront Dealers fully stocked with approved Texaco marine lubricants, to keep your boat operating efficiently and economically. Call upon them freely, or write:

The Texas Company, *Marine Sales Division,* 135 East 42nd Street, New York, New York.

TUNE IN FRED ALLEN every Sunday night — CBS

YACHTING, June, 1943. Vol. 73, No. 6. Published monthly at 10 Ferry Street, Concord, N. H. Editorial, Circulation and Advertising Offices, 205 East 42nd Street, New York, N. Y. $4.00 a year, 50 cents a copy. Entered as Second-Class matter at the Post Office at Concord, N. H., under the Act of March 3, 1879.



WANTED:

Men of experience

When the winner crosses the finish line, the cheers are for the skipper and the crew that brings her in. But the victory began with the blue prints, and the vision of the designer.

Today many of America's famous sail and power boats are doing themselves and their architects proud, as they picket-patrol the coasts they used to cruise along for pleasure. Chosen for performance records, their seaworthiness and efficiency stand our nation in good stead in the battle against the U-boats.

* * *

Today the skill of these Naval Architects, long proved in peacetime projects, is welcomed for turning out military craft, to help turn the seas back into pleasure grounds and highways of commerce.

JAKOBSON SHIPYARD, INC.

OYSTER BAY • NEW YORK

UNCLE SAM'S NEW WEAPON

in the battle of the Atlantic

DOWN THE WAYS have come the first of hundreds of the Navy's new DE boats.

These Destroyer Escorts will search out preying Nazi subs and give them the fight of their lives. They're Uncle Sam's weapon aimed to break the back of the submarine menace—to win the battle of the Atlantic.

These sleek ships are swift, sturdy and powerful—ready for long days of anything the Atlantic has to offer.

They bristle with the steely authority of a destroyer—worthy armament for a gallant crew to wield with deadly accuracy.

Already the first of these ships are seeing service. In them you'll find powerful General Motors Diesels. And an important percentage of their sister ships to follow will also have GM dependable long-range power.

Thus in today's vital assignments, these engines are displaying the stamina, reliability and quick response that owners of GM Diesel-equipped commercial boats know so well.

OFFICIAL U. S. NAVY PHOTOGRAPH

GM
GENERAL MOTORS
DIESEL POWER

Knox Reveals Deadly New Escort Ships Set to Battle Axis U-Boats

WASHINGTON, March 5 ——— Speedy and deadly, equipped with all antisubmarine weapons known to science, a new type warcraft is flying the American flag ready to battle undersea raiders, Secretary of the Navy Knox disclosed today.

"Several score" of the sleek little craft already "are in the water," he said, and "several hundred" more are called for in the construction program.

Known as a "DE" or destroyer escort, the new craft is somewhat of a cross between the famed British corvette and the larger but more expensive destroyer.

"It is more powerful and effective than the corvette," the navy said, "but lacks some of the destroyer's power, speed and armament which are not essential to convoy duty. It is a specialized craft with a definite job to do."

That job will be convoying cargo vessels through submarine infested waters, a task now performed by the bigger destroyers which then will be released for combat duty.

Calls It Small Destroyer

The new anti-sub weapon he described as "really a small destroyer." The navy said it has a displacement of 1,300 tons, a waterline length of about 300 feet and a beam of from 35 to 36 feet. That is approximately the size of destroyers of the first world war.

The armament was not disclosed but the navy said it includes "guns heavy enough to enable her to shoot it out with submarines on the surface, anti-aircraft guns of various calibre, depth charges for anti-submarine work, and torpedo tubes to deal with the threat of surface raiders."

The new craft costs approximately $3,500,000 or about half the cost of a destroyer. It can be built on a mass production basis in approximately four months as compared with the average of nine months required for a destroyer.

"And we are working up to quantity production," said Rear Admiral Edward L. Cochrane.

ENGINES . 150 to 2000 H.P. CLEVELAND DIESEL ENGINE DIVISION, Cleveland, Ohio

ENGINES . . . . . 15 to 250 H.P. DETROIT DIESEL ENGINE DIVISION, Detroit, Mich.

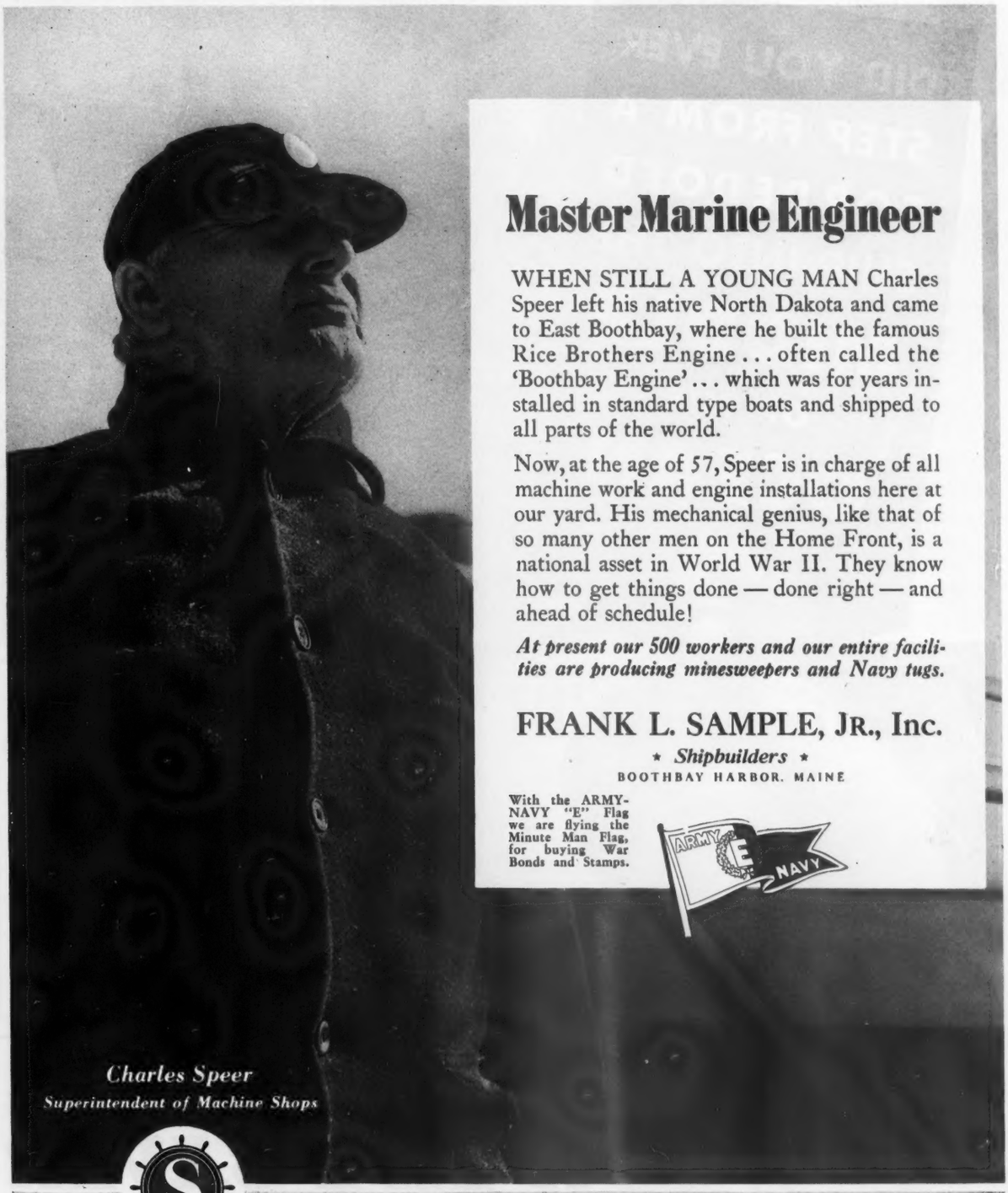
LOCOMOTIVES . . . . . ELECTRO-MOTIVE DIVISION, La Grange, Ill.

Distinguished Service . . .

IPIK

Distinguishing itself in all theaters of war . . . IPIK PLYWOOD is a proved construction material not only in HIGGINS BOATS . . . but is also being used by the U. S. Navy and Maritime Commission in their extensive shore construction and entertainments.

Ipik Company



Master Marine Engineer

WHEN STILL A YOUNG MAN Charles Speer left his native North Dakota and came to East Boothbay, where he built the famous Rice Brothers Engine . . . often called the 'Boothbay Engine' . . . which was for years installed in standard type boats and shipped to all parts of the world.

Now, at the age of 57, Speer is in charge of all machine work and engine installations here at our yard. His mechanical genius, like that of so many other men on the Home Front, is a national asset in World War II. They know how to get things done — done right — and ahead of schedule!

At present our 500 workers and our entire facilities are producing minesweepers and Navy tugs.

FRANK L. SAMPLE, JR., Inc.

★ *Shipbuilders* ★

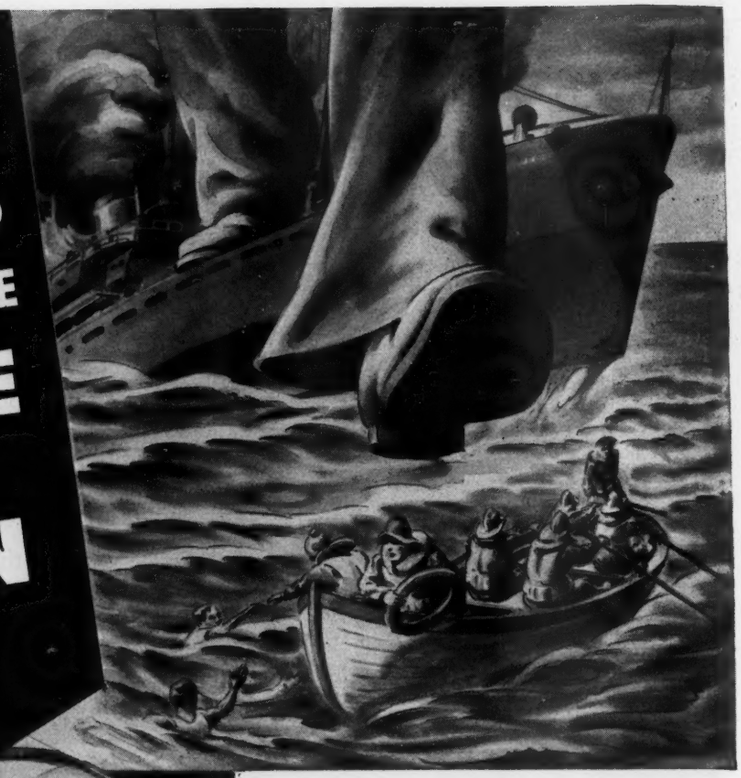
BOOTHBAY HARBOR, MAINE

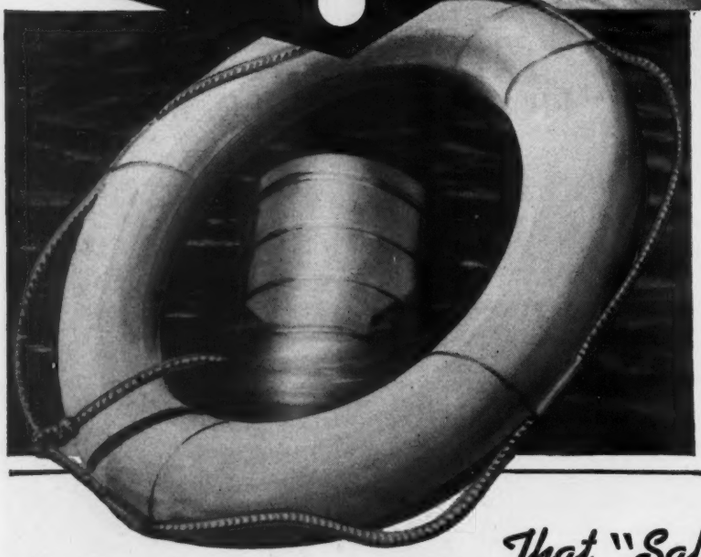
With the ARMY-NAVY "E" Flag we are flying the Minute Man Flag, for buying War Bonds and Stamps.

Charles Speer
Superintendent of Machine Shops

Complete Modern Facilities for Designing, Building, Storing and Reconditioning Yachts and Commercial Vessels up to 200 feet

DID YOU EVER STEP FROM A TORPEDOED SHIP INTO THE MIDDLE OF THE OCEAN ?





Vacuum-Insulated (DOUBLE WALLED)
AerVoiDs, even when filled with water to capacity,
FLOAT LIKE CORKS!

To be moored or TOWED--- not stored in the lifeboat or raft.

That "Safety Margin of Water" is
A LIFE SAVER

Without food, shipwrecked seamen can stay alive for weeks — but, without WATER, death comes swiftly. In several recent instances, had there been water to last *but for two or three days more*— RESCUE might have outpaced DISASTER.

FLOATING AerVoiDs would guarantee this desperately needed ADDITIONAL supply—*and without occupying any space in the lifeboat!*

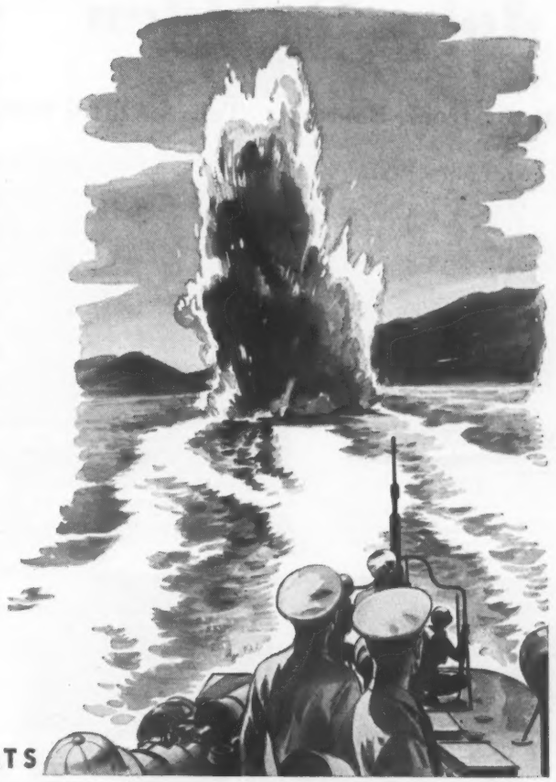
AerVoiDs would abet, NOT compete with any of the means now in use, nor interfere with the Official Regulations. Contents fully protected against contamination by salt water, and easily accessible without tools—only the hands being required. All-steel; welded; reinforced with "rib" construction and protective steel bands; strong as the steel lifeboats themselves. Stored on the deck, unlashed, they would be "self-launched" when the ship went down. Retrieved—AND LEFT AFLOAT—would supply that "Safety Margin of Water," meaning the difference between LIFE and DEATH for "Our Boys" at sea.

WRITE FOR BULLETIN G-5, ENTITLED, "AID FOR SHIPWRECKED SAILORS FIGHTING TO STAY ALIVE."

VACUUM CAN COMPANY 25 South Hoyne Ave. Chicago, Ill.

Star IN THE THEATERS OF WAR

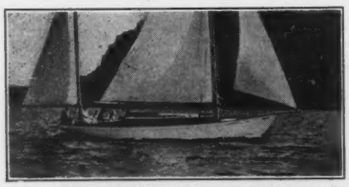
SMALL, FAST AND ELUSIVE, few targets have eluded this "surprise weapon." Hundreds of thousands of tons of enemy craft sunk or damaged bear testimony to the prowess of these boats. At Guadalcanal, in the English Channel and other important war theaters Higgins PT Boats are playing a major role in the drama of naval history now being written. Again and again the boats Higgins designed and built for the United Nations have been cited for outstanding performance. The distinctive beauty, rugged construction and trouble-free features that have won acclaim for Higgins boats are fully protected by patents. It will pay you to insist on genuine Higgins Boats for your peace-time pursuits.



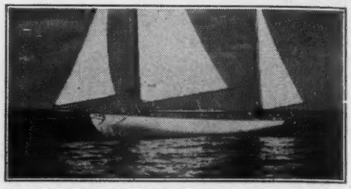
Higgins
INDUSTRIES INCORPORATED
NEW ORLEANS
Hub of the Americas
WORLD'S LARGEST BUILDERS OF BOATS
ORIGINATORS AND PATENTEES OF THE HIGGINS EUREKA LANDING BOATS

SPARKMAN & STEPHENS INCORPORATED

NAVAL ARCHITECTS
YACHT BROKERS
MARINE INSURANCE
11 EAST 44TH ST. NEW YORK

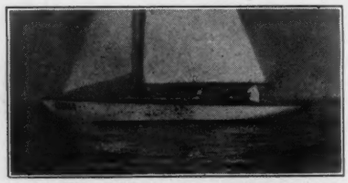


No. Y-8499 — FOR SALE — Auxiliary yawl, 38′ 6″ x 27′ 10″ x 10′ 5″ x 5′ 6″. Built in 1937 from Alden's designs. Three berths in main cabin, double stateroom, lavatory, galley, etc. For further information consult SPARKMAN & STEPHENS, Inc., 11 East 44th Street, New York. VA 6-2325.



No. Y-8129 — FOR SALE — Auxiliary yawl, 30′ x 23′ 4″ x 9′ 6″ x 4′ 6″. Built from designs by Crocker. Sleeping accommodations for three, lavatory and galley. An economical boat to run. For further data, price and location consult SPARKMAN & STEPHENS, Inc., 11 East 44th Street, New York. VA 6-2325.

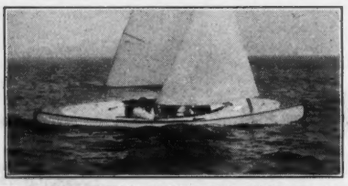
No. Y-7400 — FOR SALE — One of the popular Week Ender sloops, 35′ x 27′ x 9′ 5″ x 5′ 6″. Built by Lawley from our designs in 1938. Two berths in main cabin, double stateroom, lavatory, galley and very comfortable cockpit. Also one available for charter for the entire season. SPARKMAN & STEPHENS, Inc., 11 East 44th Street, New York. VA 6-2325.



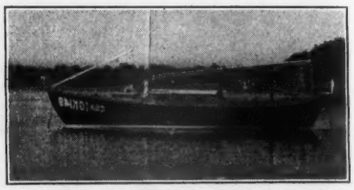
No. Y-7704 — FOR SALE — Auxiliary sloop, 34′ x 23′ 4″ x 7′ 9″ x 5′ 3″. Built at Annapolis in 1938 from designs by Rhodes. Three berths in main cabin, lavatory and galley. A smart sailing cruising boat. For further data, price and location consult SPARKMAN & STEPHENS, Inc., 11 East 44th Street, New York. VA 6-2325.

No. Y-7500 — FOR SALE — One of the popular N. Y. Yacht Club 32-Footers, built by Nevins from our designs. Double stateroom aft, main cabin, lavatory, galley and forecastle forward. Generally considered one of the most successful all around racing-cruising and day sailing auxiliaries ever built. SPARKMAN & STEPHENS, Inc., 11 East 44th Street, New York. VA 6-2325.

No. Y-7525 — FOR SALE — One of the popular International Class sloops. These boats furnish the keenest racing anywhere in the world today and the Class rules are such they can be run at a minimum of expense. We have boats for sale in all the small One Design Classes. SPARKMAN & STEPHENS, Inc., 11 East 44th Street, New York. VA 6-2325.



No. Y-7200 — FOR SALE — One of the popular Lawley 110's, which have proven to be one of the most successful racing classes developed in many years. With Genoa jib and spinnaker, the 110's give you all the thrills of racing a much bigger boat. SPARKMAN & STEPHENS, Inc., 11 East 44th Street, New York. VA 6-2325.



No. Y-70056 — FOR SALE — Cruising cutter, 24′ 4″ x 20′ 1″ x 8′ 1″ x 3′ 7″. Built 1939 by Dunham & Stadel at Stamford. Sleeps three. Sails include Genoa and storm jib. For further data, price and location consult SPARKMAN & STEPHENS, Inc., 11 East 44th Stre et, New York. VA 6-2325.

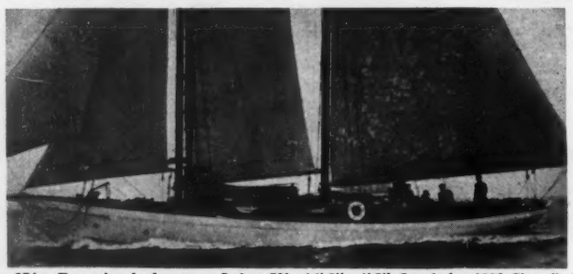
John G. Alden

Naval Architect

131 State Street, Boston ▪ Tel.: CAPitol 9480

No. 666 — Fast cruising cutter delivered fall 1938. Our design — 41′ 8″ x 28′ 5″ x 10′ 6″ x 5′ 8″. Gray motor center-line installation. Large double stateroom, galley aft. Boat in fine shape. Not used 1942.

No. 309 — Able centerboard schooner now on Lakes. 43′ x 12′ 6″ x 4′ 3″. 1941 motor. Sleeps five comfortably, double stateroom, galley amidships. Cut shows old rig, foremast since raised.

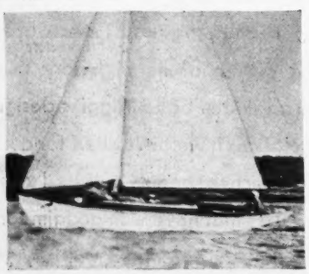


No. 356 — Exceptional schooner on Lakes. 59′ x 16′ 5″ x 4′ 5″. Our design 1928. Six cylinder Red Wing motor new 1941. Two staterooms, sleeps eight aft. Sails new 1941. Very able.

ELDREDGE-McINNIS, INC.

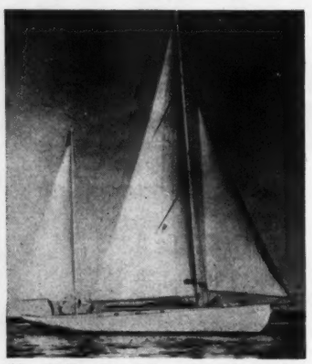
131 State Street, Boston, Mass.

YACHT BROKERS Telephone HUBbard 2910 NAVAL ARCHITECTS



No. 3670 — For Sale — Attractive modern rigged auxiliary sloop, 37′ 4″ x 28′ 6″ x 10′ 5″ x 5′ 10″. Double stateroom forward, galley aft of main cabin. Nice equipment.

No. 5251 — For Sale — 34′ Single Hander auxiliary, built 1938. Sleeps four. Priced right. Advise prompt action if interested.



No. 5249 — For Sale — One of the few quality ketches of her size now available. Dimensions: 40′ 3″ x 10′ 10″ x 5′ 6″, sleeps five. New sails 1941.

No. 2141 — One of the latest 30 Square Meter Class Sloops

No. 4989 — 40′ Motor-Sailer

No. 5106 — 28′ C.B. Auxiliary Sloop, new 1940

Coastwise Cruiser built 1940

Yankee One Design Class

53′ Twin-Screw Elco

SEVERAL OTHERS. WE SOLICIT YOUR REQUIREMENTS

COX & STEVENS
INCORPORATED
11 BROADWAY NEW YORK — TELEPHONE BOWLING GREEN 9-4000 CABLE BROKERAGE

Established 1906

ALL TYPE YACHTS FOR SALE OR CHARTER

FULL PARTICULARS UPON REQUEST

Represented in All Important Yachting Centers

FRANKLIN G. POST & SON, INC.

MYSTIC, CONNECTICUT ★ ***Telephone: Mystic 659***

Marine Agency

HERRESHOFF H-23 CLASS SLOOP
Hull completely refinished

52′ POST BUILT ALDEN SCHOONER
Write for Details

No. 2118—47′ Twin-screw power boat. Heavy construction, very seaworthy.

No. 2222—38′ Cruising cutter, boat entirely rebuilt in 1939. Like new. Will sell for less than cost of rebuilding.

No. 1923—31′ Enclosed Chris-Craft cruiser. 1941 boat. Like new.

No. 2407—25′ Seagoing motor sailer, slightly used as a demonstrator.

No. 2329—28′ Gaff-rigged cruising sloop. Priced low.

No. 3001—38′ Chris-Craft express cruiser. Priced low.

No. 2957—32′ Fisherman type hull, used as party fish boat; has helmsman shelter.

No. 4086—Herreshoff day sailing and racing sloop. Hull not refinished, but in excellent condition.

Also Other Good Auxiliaries and Day Sailing Boats

YACHT SALES & SERVICE, INC.

Naval Architects, Yacht Brokers, Marine Insurance and Appraisals

1528 WALNUT STREET **PHILADELPHIA, PA.**

OUTSTANDING OFFERING

No. 1542 — FOR SALE — 65′ x 47′ x 15′ 10″ x 7′ auxiliary keel and centerboard yawl, designed by W. Starling Burgess, and powered with Lathrop 4-cylinder 40 h.p. motor. Excellent accommodations for six or eight and crew of three. Construction excellent, hull double-planked, copper and bronze fastened. Hollow spars. Sails new in 1941. Equipped with two dinghies, one with power. Delco lighting plant, feathering propeller, and many other extras. Will be sold at most reasonable price. For further particulars and arrangements for inspection, communicate with YACHT SALES & SERVICE, 1528 Walnut Street, Philadelphia, Penna.

TELEPHONE: BRYANT 9-7670

CABLE ADDRESS: CROGIE, NEW YORK

GIELOW INCORPORATED

HENRY J. GIELOW, INC.

25 WEST 43RD STREET, NEW YORK CITY

NAVAL ARCHITECTS & MARINE ENGINEERS BROKERS

Represented, DETROIT MIAMI LOS ANGELES

C. A. Hansen

YACHT INSURANCE

Ingraham Building
Miami, Florida

116 John Street
New York

JOHN E. RODSTROM, ASSOCIATE

NO, WE DO NOT SELL BOATS, BUT WE INSURE THE BEST OF THEM

C. P. AMORY, DISTRIBUTOR INC.

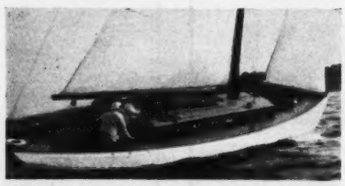
Fine Motor Yachts *Marine Insurance*

Deal Building, 99-28th Street
Newport News, Virginia

32' sloop, a fine custom job, priced low. Here is a boat that will meet the yachtsman's most exact demands on a practical cruising job. Very fast and able.

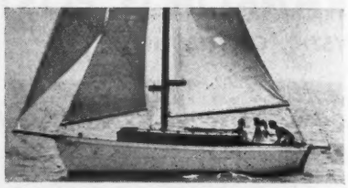
37' Casey designed and built C. B. yawl. Condition good. Many fine extras. Built in 1929 and in good condition thruout. Will stand rigid inspection.

40' Diesel motor sailer. A fine deep sea fishing boat, as well as ideal cruiser for family purposes. Very heavily built. Good condition. Here is an unusually attractive proposition for the exacting yachtsman. Let us give you more information about her.

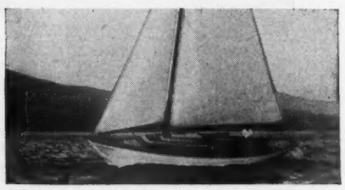


27' sloop, built in 1933, kept like new and in splendid condition.

36' Alden double ender, a fine boat, built 1939, heavily constructed. A fine family cruiser, sleeps four. Toilet, large galley, both alcohol and coal burning Shipmate. Just overhauled and in splendid condition. Sails good, almost new. Price low.



27' Bermuda rigged auxiliary cutter. A beautifully designed and built boat. Principal dimensions: 27' x 23' x 8' 10" x 4' 4". A good sailer, comfortable. Condition excellent.



36' Alden cutter, similar to coastwiser, though we think much better boat. Just overhauled and like new. Seven sails, five new. Sleeps four. Gray auxiliary, condition fine.

28' 6" sloop, almost new. Condition perfect. Auxiliary power. Sleeps four. Able, fast and dry.

A fine 100 h.p. Hall-Scott, 3:1 reduction gear motor, completely rebuilt. Also one 121 Gray new motor, direct drive.

JOHN H. WELLS, INC.

Associate — Walter H. Millard, N.A.

Telephone: Plaza 8-1065-6

444 Madison Avenue ▪ New York City

Naval Architects Marine Brokers Marine Engineers

Listings on Power and Sailing Vessels Available

EXCEPTIONAL BUYS:

37' Auxiliary Cutter built by Minneford. A-1 condition ▪ 50' Auxiliary Cutter. De luxe boat ▪ 34' Auxiliary Yawl ▪ Several New York 32's. — 45' L.O.A. ▪ 32' Baltzer Jonesport Cruiser — New 1938 ▪ 38' Motor-sailer ▪ 46' Wheeler de luxe sport fisherman. Diesel powered.

TAMS
INCORPORATED

250 PARK AVENUE, NEW YORK

ELDORADO 5-6850

Naval Architects Marine Engineers

Yacht Brokers

FOR SALE
AT REASONABLE PRICE

Yacht Maloha — 83-foot twin-screw gas heavy duty engines. Suitable for conversion to passenger or freight vessel. Can be seen Lindstrom Shipyard, Shippan Avenue, Stamford, Conn. G. S. Groves, *Owner*, 60 East 42 St., New York City. Murray Hill 2-1815.

FOR SALE A Tropical home with furnished house, South end of finest Cay on Barrier Reef off British Honduras coast, extending from Guatemala to Mexico. Good harbour for moderate draft boat. Good cruising and fishing-grounds. Beautiful and picturesque Guatemala highlands at your back-door. For price and further information write: E. J. WHITAKER, 5 Avenida Norte No. 60, Guatemala City.

FOR SALE
Atlantic, Interclub and Victory Mainsails

SLIGHTLY USED. EGYPTIAN CLOTH

R. TOBIN & SON
349 West 12th Street New York

WANTED

New or used small gasoline driven battery charger, 6 or 12 volts and one ship-to-shore radio phone. Reply Box No. 603, care of YACHTING, 205 East 42nd St., New York, N. Y.

WANTED

35- to 40-foot auxiliary sloop. Bounty or Weekender preferred. Reply Box No. 601, care of YACHTING, 205 East 42nd St., New York, N. Y.

Swap OUTBOARDS, GUNS AND AMMUNITION

with Klein's — or get CASH. We pay MORE — you pay LESS, because we're America's best known, biggest traders. Thousands upon thousands of Guns from $5 — up to the finest. All models, gauges, calibers, makes — Winchester, Remington, Colt, Savage, Smith & Wesson, etc. We also buy, sell or TRADE Fishing Tackle, Golf Equipment, Binoculars, Old Gold, Cameras, Diamonds, Jewelry, Sports Clothing, etc. Describe fully what you have to trade. "Money Back Guarantee" backed by 58 years' fair dealing. Free "Guaranteed Bargain Catalog" featuring thousands of "Hard-to-get" items. Send dime (refunded with first order) to cover mailing costs. **Klein's Sporting Goods,** Milton P. Klein, Pres., **503R South Halsted, Chicago.**

• SWAP CHEST •

8 cents a word — $1.50 minimum

Please send remittance with order

Wanted: Soapstone Cabin Heater, boat fireplace or other small coal-wood heater, not range or oil type. Will Swap cash. Box 6–1.

Will swap for cash: "Universal Fisherman" motor, 1-Cyl., 8 H.P. with reversing gear, Model WMG, factory rebuilt, not used, still in original crate, plus new spare parts. Box 6–2.

Swap three Fiege type 5/32" Stainless Steel turnbuckles and eye end Sockets and / or cash for chronometer-watch. Box 6–3.

Wanted: 5 inch modern compass to fit Perko binnacle or larger compass complete with binnacle. Also one inch anchor line. Box 6–4.

Star mast (rigid rig), boom, stainless steel rigging, halliards, mainsail, jib — very good condition — will swap for cash. Box 6–5.

Two English saddles — practically new — hardly broken in — will swap for two suits Star sails — must be in excellent condition. Box 6–6.

Send Replies to Swap Chest, Care "Yachting"

205 East 42nd Street, New York

FOR CHARTER
NEW AUXILIARY YAWL

39′ x 29′ x 10′ 6″ x 6′

Casey-built in 1942. Complete cruising racing (10 light sails) equipment including all fuels. All latest improvements — fluorescent lighting, 2 stoves, radio, awning, etc. In commission in Buzzards Bay and Marblehead. $250 per week. Will guarantee minimum of 5 excellent sailing days. Responsible yachtsmen only. Reply Box 602, care YACHTING, 205 East 42nd Street, New York, N. Y.

FOR CHARTER
By the Week - Month or Season

Auxiliary Schooner . . . 34 feet
Auxiliary Cutter . . . . 26 feet

Available Long Island Sound

ELWOOD SPRAGUE
349 Atlantic Avenue Oceanside, N. Y.

FOR SALE

Lawley yawl, 36′ x 10′ x 5′. Built 1925 by Lawley. Roomy cabin, enclosed toilet, galley, 4-cylinder 20 h.p. marine engine. Sails in good condition. Located near New York. Price $1500. Box No. 604, care of YACHTING, 205 East 42nd Street, New York City.

FAST CABIN SLOOP 22′ x 6½′ x 3½′. Built 1939. Lead keel, white cedar planking, white oak steam bent frames, Sitka spruce spar, mahogany trim. All fastenings and fittings either brass or bronze. Cabin, sitting headroom, stove, icebox, etc. Marconi rig, two suits Egyptian duck sails. Special outboard auxiliary. Boat and equipment practically new condition. Has cruised to Canada. $750. M. BLITZER, Pinesbridge Farm, Ossining, N. Y.

WANTED

Do you know anyone who will sell his Snipe class sailboat? If so please write giving her age, price and other pertinent details. It would help matters if located near Boston. Reply, Box 606, care of YACHTING, 205 East 42nd Street, New York, N. Y.

AN UNUSUAL OPPORTUNITY — to obtain a numbered first edition at a quarter of its published price!

MEN AGAINST THE RULE

By

CHARLES LANE POOR

Foreword by George A. Cormack

A history of the Measurement Rule and of its effect upon yacht design. The story starts with the formation of the New York Yacht Club in 1844, traces the many attempts to find a satisfactory rule, or definition of the size of a yacht for racing purposes, and closes with the final adoption, in 1931, of The New York Yacht Club Rule, for large yachts, Classes J, K, and L, by the Yacht Racing Association of Great Britain. To this is added a short discussion of the relative and actual speeds of modern racing yachts, and of the methods of granting allowances or handicaps.

A "must" book for the racing skipper

Profusely illustrated, $2.50

Book Department

YACHTING
205 East 42nd St. New York

CHARLES W. BLIVEN & CO.

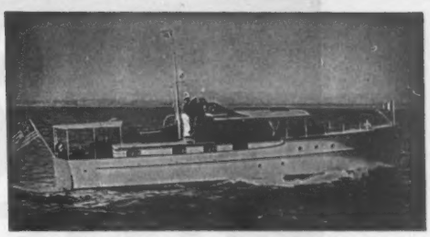
NAVAL ARCHITECTS YACHT BROKERS MARINE INSURANCE
APPRAISALS

Pershing Square Building, 271 North Ave., New Rochelle, N. Y.
Telephone: NEw Rochelle 2-2300

Evenings, Sunday and Holidays, Telephone: Larchmont 2-1977

ATTENTION:
BOAT OWNERS—

Have clients waiting for good boats, particularly small racing class sail boats and auxiliary cruisers—send us full particulars.



Many of our listings are twin-screw cruisers over 40′ — suitable for Coast Guard Reserve.

LIST YOUR BOAT WITH BLIVEN!!

WILLIAM GARDNER & CO.

21 WEST STREET, NEW YORK

Telephone: DIgby 4–9257

NAVAL ARCHITECTS

MARINE ENGINEERS MARINE BROKERS

THOMAS D. BOWES, M.E.

Consulting Naval Architects and Engineers

Lafayette Building
Chestnut and Fifth Streets, Philadelphia

Lombard 0658 and 0659 ***Cable*** **BOMO**

CHARLES D. ROACH

Naval Architect and Marine Engineer

1500 S. W. 20th Street, Ft. Lauderdale, Fla., Telephone 2400

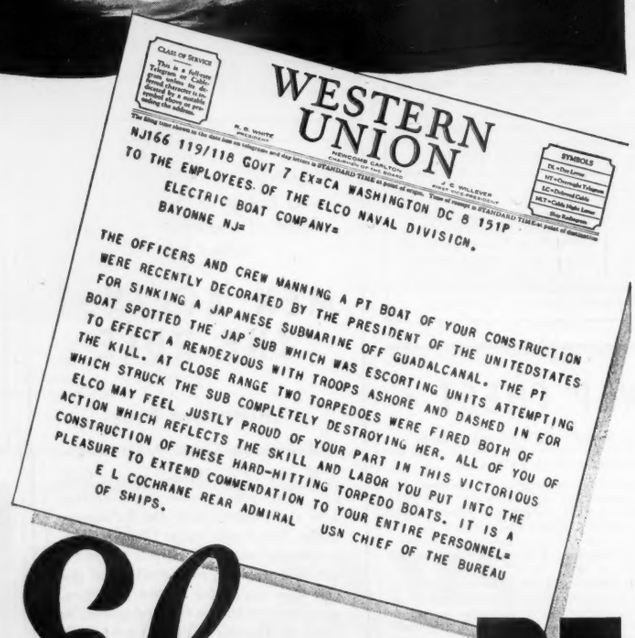
For Sale: Auxiliary ketch, 62′ x 53.5′ x 16′ x 5.5′. Crosby built, oak frames, cypress planked. Marconi rig. Sound and in good condition throughout. Outside ballast 16,000 lbs., inside 1,000 lbs. all lead. Stateroom aft, two berths, three in main cabin all equipped with box springs and mattresses. Large galley, modern ice box and bottle gas range. Crew (3) quarters forward. Two sets 32 v. batteries, Home-lite generator. Fluorescent lights operated from dock power line. 12′ lapstreak dinghy, 14′ fast power launch both on davits. Sail equipment complete with Genoa jib, storm trysail and covers. Deck hardware chrome plated. 65 h.p. heavy duty Kermath motor. Speed 10 m.p.h. Inquire Box 605, care of YACHTING, 205 East 42nd Street, New York City.

ELCO PT SINKS BIG JAP SUB!

FROM the U. S. Navy comes this wire revealing the latest triumph of its Elco PTs . . . complete annihilation of a large Jap submarine off Guadalcanal.

Ever since Lt. Commander Bulkeley's squadron made headlines that electrified the nation, the exploits of Elco PTs have been an inspiration to us all. Recently their sensational deeds in the Solomons have been hailed in news dispatches and in a famous picture magazine. Enemy ***cruisers, destroyers, transports,*** an ***aircraft tender, landing boats, planes,*** and now a ***submarine*** — all have fallen prey to the dazzling speed and lethal sting of these mighty midgets.

The men and women workers of Elco take tremendous pride in the feats of the officers and crews who man the boats they build. This pride is reflected in the amazing rate at which they are turning out the new, faster, harder hitting Elcos now being rushed to the world's battle areas.



WESTERN UNION

NJ166 119/118 GOVT 7 EX=CA WASHINGTON DC 8 1512

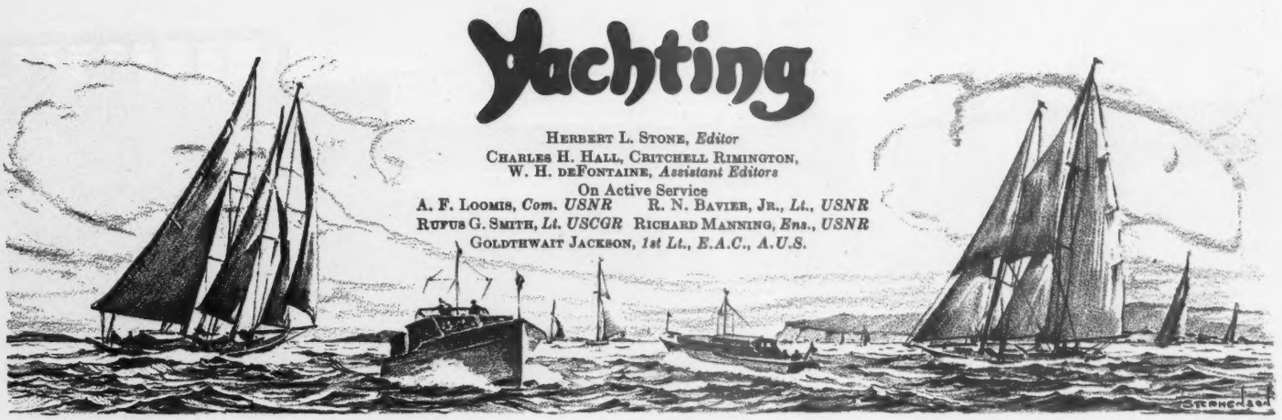
TO THE EMPLOYEES OF THE ELCO NAVAL DIVISION.
ELECTRIC BOAT COMPANY=
BAYONNE NJ=

THE OFFICERS AND CREW MANNING A PT BOAT OF YOUR CONSTRUCTION WERE RECENTLY DECORATED BY THE PRESIDENT OF THE UNITEDSTATES FOR SINKING A JAPANESE SUBMARINE OFF GUADALCANAL. THE PT BOAT SPOTTED THE JAP SUB WHICH WAS ESCORTING UNITS ATTEMPTING TO EFFECT A RENDEZVOUS WITH TROOPS ASHORE AND DASHED IN FOR THE KILL. AT CLOSE RANGE TWO TORPEDOES WERE FIRED BOTH OF WHICH STRUCK THE SUB COMPLETELY DESTROYING HER. ALL OF YOU OF ELCO MAY FEEL JUSTLY PROUD OF YOUR PART IN THIS VICTORIOUS ACTION WHICH REFLECTS THE SKILL AND LABOR YOU PUT INTO THE CONSTRUCTION OF THESE HARD-HITTING TORPEDO BOATS. IT IS A PLEASURE TO EXTEND COMMENDATION TO YOUR ENTIRE PERSONNEL=
E L COCHRANE REAR ADMIRAL USN CHIEF OF THE BUREAU OF SHIPS.

"The Boat Behind the Headlines"...

Elco PT

Elco Naval Division, ELECTRIC BOAT COMPANY, Bayonne, New Jersey



Yachting

HERBERT L. STONE, *Editor*
CHARLES H. HALL, CRITCHELL RIMINGTON,
W. H. DEFONTAINE, *Assistant Editors*
On Active Service
A. F. LOOMIS, *Com. USNR* R. N. BAVIER, JR., *Lt., USNR*
RUFUS G. SMITH, *Lt. USCGR* RICHARD MANNING, *Ens., USNR*
GOLDTHWAIT JACKSON, *1st Lt., E.A.C., A.U.S.*

VOL. LXXIII JUNE, 1943 NO. 6

O.P.A. BLOWS HOT AND COLD

WE KNEW, of course, that the picture of gasoline rationing was always liable to change; but neither we, nor the many owners of power driven boats, were prepared for quite such an abrupt about face as was made by the Gasoline Rationing Branch of the O.P.A. in mid-April. After issuing, in late March, a directive granting limited non-occupational fuel for motor boat use, and being assured that it would stick, it was a bit of a shock to get a complete reversal some three weeks later. One of our readers probably spoke what all were feeling when he wrote: "Shortly after noting your box on page 20 of the April issue, I ran across the latest O.P.A. 'warning' in today's handout. Putting one and one together in all possible combinations, I get the same answer: Someone is getting his leg pulled. And, when the joint has sufficiently stretched, the ensuing malady will be — no gas for boats."

Well, if there is not enough gas for non-occupational use of power boats, that's that. There being a war on, no one will grouse unduly. But what does gripe the boat owner (and with good reason) are these rapid changes of decision, so that no one knows what's what for a week at a time. Taking the March pronouncement at face value, many owners spent good money to have their boats fitted out, only to be told three weeks later that there would be nothing doing for the summer. And apparently that still goes in the gas rationing area, except for those whose boats may have duties in the Coast Guard Auxiliary or Reserve.

In his defense, the O.P.A. Chief makes out a real case as to the gasoline shortage on the East Coast. So it's no use trying to predict if there will be a change. There probably will be — several of them — but whether they will help or hinder the man who yearns for a week-end afloat now and then, is anybody's guess. We won't try it. Read the daily press. A monthly is too slow to keep up with the whirl.

THE KIDS HAVE ALL THE FUN

ALTHOUGH the local yacht club is apt to be the mecca for all the young ones for miles around, it is only too rarely that a club really organizes a season of activity expressly tailored for juvenile participation. It would seem that the war years would be the ideal time for a yacht club to go out of its way to become particularly attractive to juniors, and we have often wondered why someone hasn't done something about it. Now we are glad to report that someone has.

The Bayside Yacht Club Cadets is another brain child of Commodore Walter S. Dayton, who points out that the basic idea comprises professionally supervised planned programs (except Saturday and Sunday) during July and August for a group of congenial, carefully selected youngsters. The agenda includes the use of a special clubroom, small boat sailing, swimming, marlinespike seamanship, simple navigation, beach parties, rainy day activities — and cooking for the young ladies. As proposed, the fee will be about $25.00 for a two months period, with the parents taking out a social membership in the club, if they are not already members.

It strikes us as being a sound idea for other clubs to consider, and we would especially like to hear of one which concocts a plan whereby the seniors can take such a summer off, too!

CONTENTS

FRONT COVER, CRUISING DAYS
From a water color by Tore Asplund

RUNNING A YACHT CLUB IN WARTIME
By Jasper M. Rowland 19

PT'S IN ACTION. *By Henry S. Parker, Lieut., U.S.N.R.* 23

LIFE BOAT PASSAGE. *By George G. Breed* 26

"WE JOINED THE NAVY . . ."
By Lt. (j.g.) Isabel DeC Porter and Ens. Faith Moffat, U.S.N.R. 28

SAFETY AT SEA. *By Critchell Rimington* 30

THESE PERENNIAL PC'S. *By Curtis Zahn* 34

TWENTY YEARS OF YACHT DEVELOPMENT
By Herbert L. Stone 37

CHESAPEAKE BAY CRABBING SKIFFS
By Howard I. Chapelle 41

THE POST-WAR SMALL BOAT — PART IV
By Robert J. Wood and John S. Barnes 44

YACHT DESIGNING FOR THE AMATEUR — PART III
By Charles H. Hall 46

"GADGETS & GILHICKIES." *By Ham de Fontaine* 48

THE MONTH IN YACHTING 49

WATERFRONT NEWS. *By "Beachcomber"* 58

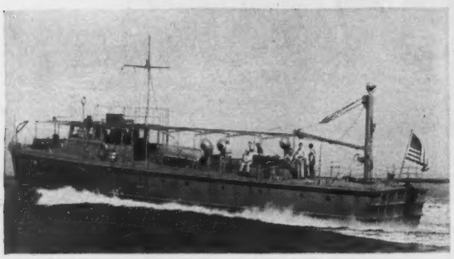
COAST GUARD AUXILIARY NEWS 62

YACHTING, published monthly at 10 Ferry Street, Concord, N. H., by Yachting Publishing Corporation; Editorial, Circulation and Advertising Offices, 205 East 42nd Street, New York, N. Y. Herbert L. Stone, *President and Treasurer;* Alfred F. Loomis, *Secretary;* Carl Kappes, Jr., *Advertising Manager.* Subscription price, $4.00 a year; single copies, 50 cents; foreign subscription, $5.00; Canadian subscription, $4.50. Changes of address must reach the Circulation Office four weeks before they are to be effective; old and new addresses must always be given. Entered as Second Class matter at the Post Office at Concord, N. H., under Act of March 3, 1879.

Copyright, 1943, by Yachting Publishing Corporation.

Title registered U. S. Patent Office. European agent: The International News Company, Ltd., Bream's Building, London, England.

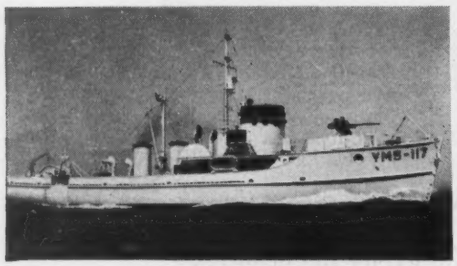
Above: Recent model of the speedy motor torpedo boat produced by the Elco Boat Company.

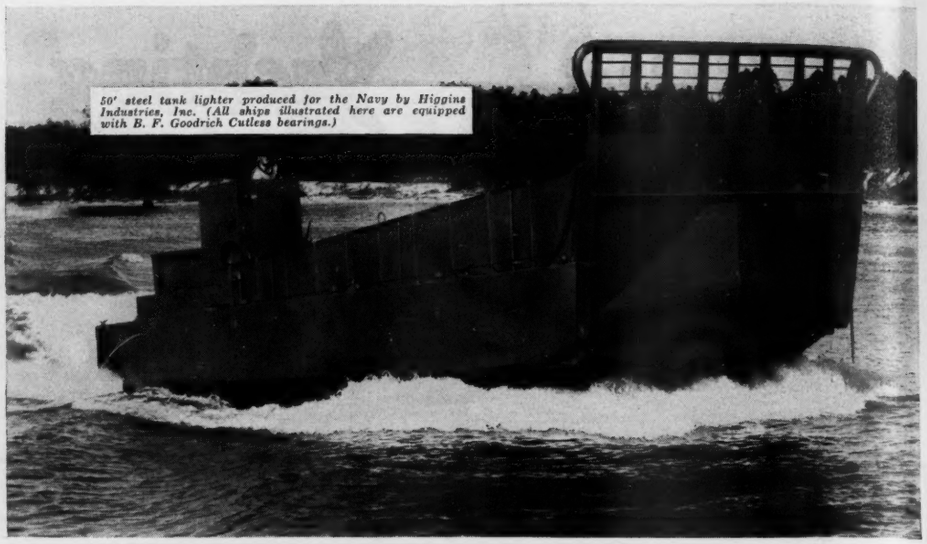


Above: 100' U. S. Army Rescue Vessel built by Ventnor Boat Works.

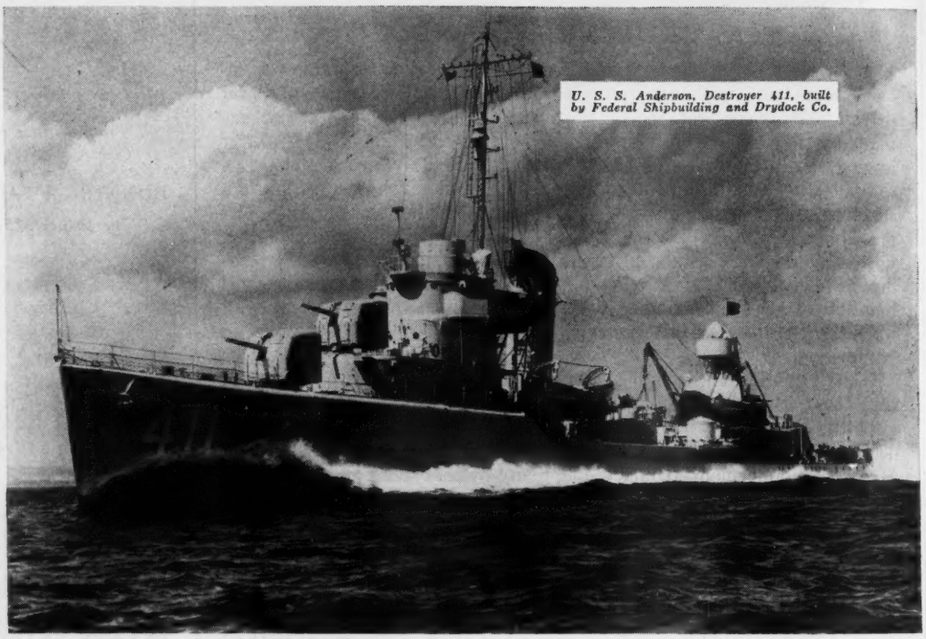
Above: Navy 110' sub-chaser built by Ludera Marine Construction Company.

Below. The first 135-ft. mine sweeper launched in the U. S. Builder is the Harbor Boat Building Company.





50' steel tank lighter produced for the Navy by Higgins Industries, Inc. (All ships illustrated here are equipped with B. F. Goodrich Cutless bearings.)



U. S. S. Anderson, Destroyer 411, built by Federal Shipbuilding and Drydock Co.

Rubber bearings help keep these ships at sea

KEEPING ships at sea speeds up construction of *new* ships, also repair of damaged ones — because it saves drydock space for those that need it most.

Ships with Cutless bearings spend less time in drydock than those with any other type of bearing, because the bearings and shaft liners so rarely have to be replaced. These soft rubber bearings cushion the little sand or grit particles that cause wear — let them pass right through the bearing without harm to either surface. No kind of hard-surface bearing, wood, phenolic or metal, could make this saving.

Cutless bearings also save bronze, another critical material. They make boats smoother, reduce vibration; they can take care of slight misalignments sometimes resulting from rushed work in construction.

Ships in the pictures above are only a few typical examples of the many types using Cutless bearings today. These bearings are in service on every kind of war ship from the smallest inboards to the biggest ships afloat.

Made by The B. F. Goodrich Co., Akron, Ohio. For full information about them and their use write to

LUCIAN Q. MOFFITT, INC.
Engineers and National Distributors
AKRON, OHIO

B.F. Goodrich *Cutless* PROPELLER-SHAFT Bearings

FOSTER BOAT CO.

SHIPBUILDERS

CHARLEVOIX • *The Beautiful* • MICHIGAN

June, 1943

Dear Friends:

UNRATIONED . . . in Charlevoix -

Plenty of clear, fresh, invigorating air . . . cheerful, health-giving sunshine . . . free expanses of sandy beach . . . fine hotel accommodations at reasonable prices . . . pleasant rooms in well-kept homes . . . neat tourist cabins . . . summer cottages, available for the season . . . free trailer camp locations . . . beautiful parks . . . picnic spots, with tables and stoves . . . wooded trails . . . saddle horses and bridle paths . . . free tennis and shuffleboard courts . . . golf courses . . . free docks for visiting yachts . . . deep-sea trolling and still-fishing . . . all kinds of boats for hire . . . supervised activities for the children . . . library facilities . . . fine churches . . . fraternal organizations . . . friendliness . . . hospitality . . . good-fellowship.

For security and enjoyment, bring your loved ones to Charlevoix this summer. We'll gladly send you further information -- or you may address your inquiries to the Board of Commerce, Charlevoix, Michigan.

Cordially,

Hy Foster

President

IN THE WIND

▶ My first skipper in the last war (an ensign commanding a converted yacht operating as a patrol boat from the base at the Government Landing in Newport) was strikingly tall, weighty, rufescent of complexion and had the keen eyes of a Viking. . . . His name was Bob Meyer. . . . Recently, a wireless despatch from AN ADVANCED SOUTH PACIFIC BASE related what Lieut. Robert B. Meyer, U.S.N.R., chairman of the race committee of the New York Yacht Club and thrice in succession winner of the R boat championship on Long Island Sound as well as innumerable others, is doing in this man's war. . . . More than anything, he wanted duty aboard small boats, preferably the PT's. . . . That's why he took a lieutenancy instead of the two-and-a-half stripes of the higher grade which he had been proffered. . . . He's found his niche as a sort of "trainer and manager" of the youngsters who operate the deadly hornets of the PT fleet — and of him Capt. Marcy Dupre, Jr., his immediate superior, said: "Bob Meyer should be an inspiration to everyone in the Navy."

Just another case of a gallant yachtsman making good. . . .

▶ A Blizzard met a Snowball out there in the Pacific not long ago. . . . Only Colonel Blizzard thought he was having his leg pulled when young Lieutenant Snowball introduced himself. . . .

▶ And Caleb Bilgewasser, at present on a secret mission which has something to do with resuscitating the Dead Sea, I believe, informs me he has met Otis P. Driftwood floating around. . . .

▶ "While laid up with the flu," writes the editor of the *Cathedral News* of Fond du Lac, Wisconsin, "I appropriated one of your paragraphs to help fill my parish paper that had to go to press regardless of my physical condition. . . . I write to thank you for the timely help you did not know you were giving, and to tell you I enjoy each month's series of your stories, notes and observations. . . ."

Thank you, Dean Edward Potter Sabin. . . . Yours is the first letter I ever had from a dean, by the way. . . . I wasn't on the dean's list at New Haven. . . .

▶ To date, Rommel has proved himself a more resourceful escapist than the late Houdini. . . .

▶ It's rumored that the Italian people are being warned to be polite to the invasion forces of the United Nations. . . . This admonition would seem to be superfluous in view of the fact that about all Mussolini's minions have left is their manners. . . .

▶ I had an informal reunion the other night with Ogden Nash, the antic versifier, and Cord Meyer, brother to Lieutenant Bob. . . . Cord, a flyer in the last fracas, was as eager to get back to the air as Bob was to the water, but he didn't have Bob's luck. . . . Vets who can't get into any branch of the service feel sort of out on a limb. . . . Ogden, recalling pre-war sailing days at Newport, also spoke modestly of the musical play he's at work on with S. J. Perelman. . . . New York will get a look at it next October. . . .

▶ The *Ellsworth* (Me.) *American* came out the other day with a stirring piece about a lady in those parts who was a prodigious example of what woman can do in the war crisis. . . . Apparently, a fella in East Sullivan (Me.) was engaging another fella with a wood-sawing machine to prepare firewood and asked him how about a helper. . . .

"The missus does that part," was the reply. . . .

"The outfit arrived," continued the *American's* story, "and a slight woman with a young child alighted from the truck. She not only 'passed the ammunition' (which was seven and a half cords) but tended the four and a half year old son as well, serving a dinner pail luncheon during the period. Total cords of wood handled that day were eleven as the couple had another woodpile or two before their arrival, and one en route home. . . . This mother of eight children had been equally as busy at town woodpiles all week with no half day off. . . . Weighing not more than 115 pounds and looking to be in her twenties, seeming more a sister to her sixteen-year-old daughter, this mother has worked loading cars with pulpwood. . . . This woman wears neither uniform, insignia nor medal, but she has what it takes to win a war. Salute Mrs. Bartlett West of Tunk Lake! . . ."

But maybe she accomplished it all by *Maine* strength — which is notorious. . . .

And "Skip" Getchell comments: Thought you might like to read it in case 205 (East 42nd Street) should convert to wood-burning and need extra help in the boiler room. . . .

▶ Memo to Victory Gardeners: You can make anything out of Soy Beans except a living. . . .

Henery Ford, it's reported, favors a Soy Bean suit. . . . I'd be afraid that, if rained on, it might turn into a soup. . . .

▶ Easter Sunday last, Mike Schube of Chicago, Photographer's Mate 3d C., was pictured at sea on Central Park Lake with a couple of WAVES who were manning the sweeps (for the benefit of the candid camera, apparently, since obviously neither knew how to row). . . .

Incidentally, one of the gals was named *Lowavia*. . . . The other's surname was *Sumpter* — but *she* didn't fall, either. . . .

However, a division of the fair auxiliaries has been taking instruction in jiu-jitsu (the Chinese version) under the tutelage of one Jo Chiang, who according to a despatch from Washington is teaching his fair pupils "how to fall without getting hurt. . . ."

▶ In Detroit, Mrs. Tekla Lakits, thirty-one, named an "Elsie" in her divorce bill. . . . She testified: "My husband loved her more than he did me and told me so. . . . He spent $5,000 on her, then said he was going away with her and be a tramp. . . . I tried living with the two of them, but it was too crowded. . . ."

It turned out that "Elsie" was a 30-foot sail boat. . . .

▶ Memo to Mr. and Mrs. Ralph Wiley, Oxford, (Md.), Groupers:

Mrs. Ralph Wiley, of Lewiston, Idaho, wrote a letter to her husband, Pvt. Ralph Wiley at Sheppard Field, Texas. There were two Ralph Wileys at the field, but one of them had just been transferred to Las Vegas, Nevada, and the letter was forwarded to him. . . . He read it before discovering that it was for the other Ralph Wiley, and wrote a note of apology which he sent along with the letter when returning it. . . . The letter was delivered by mistake to another Lewiston woman, also named Wiley. . . . She forwarded it, also enclosing a note of apology for having read it by mistake. . . . Finally, the right Mrs. Wiley received two letters — one containing the two notes of apology, the other an irate missive from her husband wanting to know why she hadn't written.

▶ Mayor La Guardia (le petit chouxfleur) lately approved "a five-unit uniform" for lady air raid wardens "minus the pants. . . ."

His Honor, a married man, doesn't believe in letting woman wear the pants under any circumstances. . . .

▶ Caleb Bilgewasser maintains that no cow, however good-hearted, will give milk unless you get on the right side of her. . . .

▶ The coal miners got a lot of credit for going back to work for Uncle Sam — but more cash. . . .

▶ An army travels on its stomach, according to Napoleon, and the Axis appears to be having stomach trouble. . . .

▶ The tendency of Americans to be hasty has often been deplored — but it comes in mighty handy when you're winning a war. . . .

▶ One of the trimmest cutters on the Sound — Elon Foster's *Panacea* — is overboard as usual this summer and it's rumored she'll be under charter for a couple of weeks to a prominent Southampton Corinthian and bon vivant. . . .

▶ Rationing may be good for our figures but unfortunately it won't reduce the National Debt. . . .

Everything has gone up except the five-cent tip and the Interborough fare. . . .

▶ War is a luxury the World can't afford more than once in every twenty years or so. . . . And a good thing, too. . . .

TELLTALE

ALICE WAS A LADY... BUT SHE'S CHASING PIG BOATS NOW

"Patrol Plane Reporting!" Hats off to the Coast Guard Auxiliary —the merchants, bankers, business and professional men who have patriotically tendered their services to help guard America's shores.

Hunting subs in shipping lanes. Rescuing victims of Nazi torpedoes. Patrolling lonely Arctic seas. It is all in a day's work for the Coast Guard.

To this service have flocked tens of thousands of keen, hard-bitten sailormen, and thousands of small craft — the "Alices" of America's pre-war pleasure fleet.

We are humbly proud of the fact that a high percentage of these boats are driven by Federal-Mogul Marine propellers, and that Federal-Mogul is equipping a steadily growing proportion of ships for the Allied Navies.

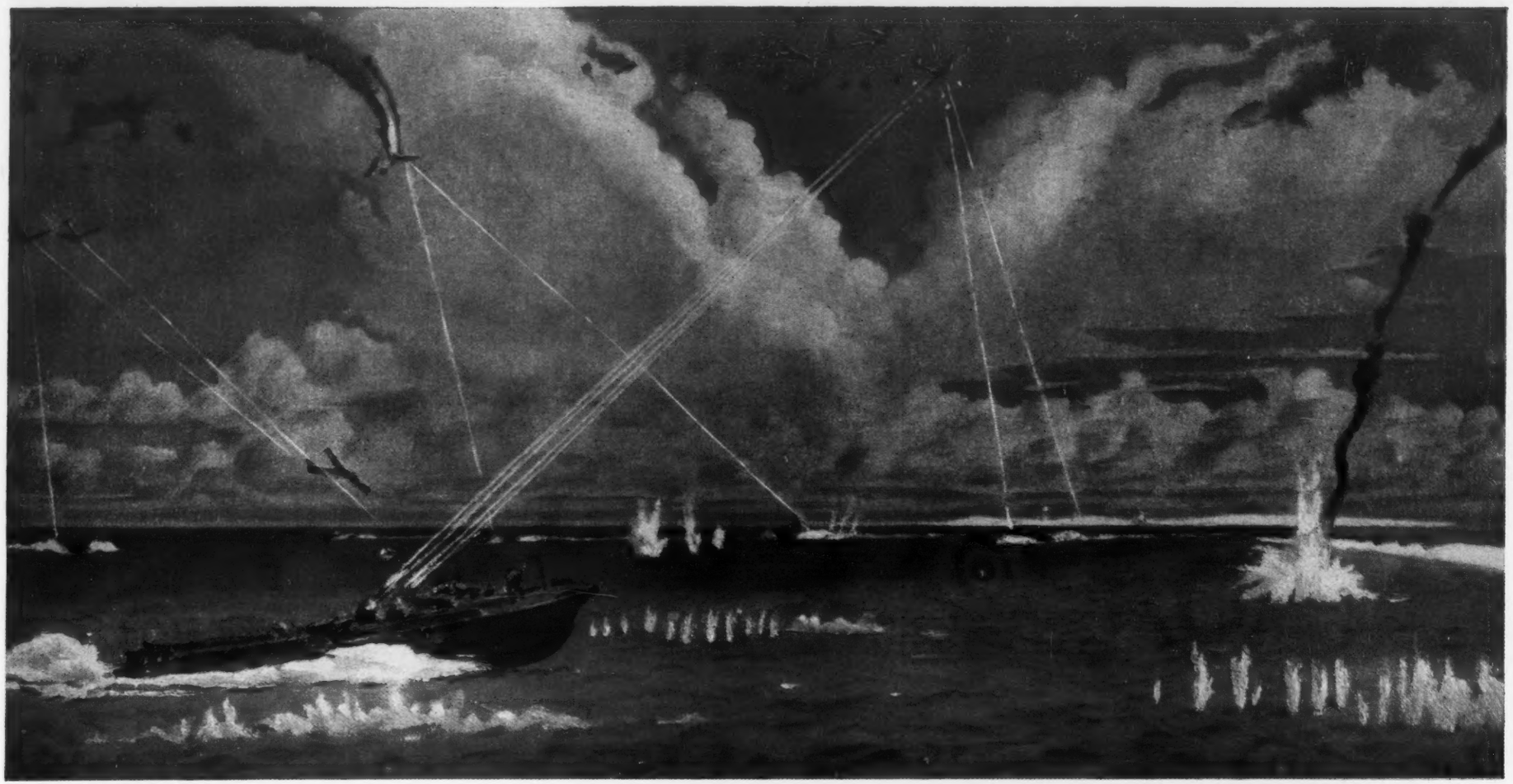
Our war job is to "keep 'em turning," to continue the engineering research that has already notably stepped up propeller efficiency. And to maintain precision manufacture at its all-time peak.

When the fleet comes home — when men sail for fun again—the world's largest builders of motor boat propellers will be ready to equip and service a new and greater armada of pleasure craft with the finest of all Federal-Mogul products. Federal-Mogul Marine, 4036 Beaufait Avenue, Detroit, Michigan.

"Heave Him Aboard!" To the ceaseless vigil of these auxiliary guardsmen, patrolling America's coastal and inland waters by day and night, thousands of fliers, sailors and civilians owe their lives.

"Stand by for Boarding Party." Armed patrol boats of the Coast Guard are ever on the alert for unknown or suspicious craft. Among their many tasks is the prevention of landing by would-be saboteurs.

When the War Clouds Roll Away — A vast new peacetime fleet will take the water. Then, Federal-Mogul's great experience and facilities will again be devoted to serving those who build, sell and sail pleasure craft.



PT'S AND ZEROS IN THE BATTLE
OF MIDWAY ISLAND, JUNE, 1942

From a painting by Griffith Baily Coale, Lieutenant Commander, U.S.N.R.

Courtesy United States Navy

See article, page 23

YACHTING

Volume LXXIII JUNE + 1943 Number 6

Louis Holmes

The Chautauqua Lake Yacht Club of Lakewood, N. Y.

RUNNING A YACHT CLUB IN WARTIME

The Sailors Take Over a Yacht Club and Make It a Vital Thing in the Life of the Community

By JASPER M. ROWLAND

THESE are days when the governing bodies of yacht clubs are giving serious consideration to their future progress and their ability to weather the turbulent waters of wartime living. For over a year now, storm warnings have been flying in the form of changes of memberships and relaxing of activities. Now is the time to batten down the hatches and clear ship for action.

For you members and officers, concerned about the future of your particular clubs, this article, describing the problems that confronted a depression-sunk club, is written. May the reviving methods described provide inspiration so that you can guide your club through the storm.

Sailing on inland Chautauqua Lake had enjoyed many peaks and suffered depressions through the years since the founding of our yacht club in 1894. World War I almost forced it on the rocks. Finally, the trying times of the early Thirties landed it high and dry on a reef with such a leaky hull that officers and members despaired of ever reaching navigable water. Yet we did come through with all sails drawing; therein lies the story.

By the beginning of the Thirties, it became apparent to the governing board that the club was slipping. To improve business, they invited the local Kiwanis Club to meet at the clubhouse through the summer, making the old place hum with activity. This was mistake number one. While Kiwanis is an excellent organization, it has not, nor is it expected to have, an overwhelming interest in nautical affairs.

It would have been much better for the club's directors to have turned heaven and earth to bring into its membership all water minded people or groups who would sustain the club with its only reason for existence, interest in sailing.

Louis Holmes

A close finish brings the ladies to the dock

The Kiwanians — and bear in mind that it could have been any other distinguished group like the local bar or medical association — gave the club much life for a short period. Unwittingly, however, with their local civic and social interests, they weaned the club away from sailing. Soon the Kiwanians grew tired of maintaining a yacht club and drifted back to their downtown quarters. Soon there was no yacht club.

About this time, sixty of us active youthful sailors, with about $75.00 in the bank, offered to take over the club property — building, furniture, fixtures, assets and liabilities complete — provided only that we could run the show as a sailing organization. Ten harassed men turned over the helm. Most of them stayed with us to enjoy our progress, fun, activities and successes.

Today, our club property is conservatively valued at $25,000. We have cut an $8,000 indebtedness more than in half and added approximately $8,500 value to the place in the short span of six years. All this was accomplished with a limit of 100 active members, each paying $25.00 per year dues, and without benefit of one-armed bandits.

We have played host to two nationally prominent regattas, have increased both our sailing and cruiser fleet tenfold, and maintained a full program of sailing activities. Even this year looks good to us. The secret of our success is that we are first, last and foremost, water minded.

By being studiously water minded is meant that we wrote by-laws which, God willing, will never permit the club to drift again off its clearly defined course of boating interest. Framing by-laws was a major accomplishment, arrived at only through exhaustive research and theorizing. We wrote to the editor of YACHTING, asking his assistance. He sent us many copies of constitutions from other yacht clubs. Most of these were probably all right as models for the organization of any general formal group of men but, for a specific group such as sailors, there were too many weak planks permitting possible leaks. Our best model for a workable constitution, which should hold a yacht club together, came from a comparatively newly formed sailing organization, the Youngstown (N. Y.) Yacht Club. We operate today under rules essentially the same as its.

First and foremost in our new rules are provisions to keep the control of the club forever in the hands of the water minded members. We provide that all flag officers must, at the time of their election to office, be either sole or partial owners of boats. This is based on the theory that boat owners are a particular group in any yacht club's membership which has more than the average interest in promoting the water end of activities. True, this exclusive clause eliminates many a prominent banker, lawyer, merchant and industrialist to whom the honor of being Commodore would be a graceful gesture; but, in making that sacrifice, we receive, in turn, virtual assurance that our officers are technically fitted for performing their duties.

We further provide that no officer can succeed himself more than two consecutive one-year terms. He may be recalled after a break of one year. This prevents one man from holding the same office year after year, as is sometimes the case. It provides instead for a steady flow of new men, fully qualified and poised to do outstanding jobs during their short terms.

Officers are elected from the board of directors by the directors instead of by the members. In many cases, the members would be prone to choose the most popular man, who might be a good sport sailing, or grand at parties, but not necessarily that happy combination of drone and executive who must lead the club through a successful season.

All the power and authority for governing the club is vested in the board of directors. The directors listen to the advice of members, of course, weigh opinions and act as they deem best. The board operates with the full confidence of the members because it is truly a body of the members' choosing.

In some clubs, a nominating committee is appointed at the time of the annual meeting. Its members step outside for a few moments and return quickly with a slate composed essentially of those men whose terms of office are expiring. This closed corporation method keeps many a deserving man from serving his club as an efficient board member and officer. It has a tendency to keep the control of a club in the same clique, which, good though it may be, can mellow in time to a conservative drag on progress.

To prevent such a catastrophe, our members really choose

Class "E" scows breaking out their spinnakers as they cross the starting line

Louis Ho

their directors. Twenty days prior to our annual meeting, the Commodore appoints a nominating committee which must select a slate of double the number to be elected. If five directors' terms are ending, they probably will be renominated; but five other good men will appear on the slate with them, opening the field wide for a serious selection by the members.

These nominations must be posted by the nominating committee one week in advance of the annual meeting. To these can be added, by any ten signatories, nominations up to and including the number to be elected. These extra nominations must be submitted three days in advance. In this manner, should the club ever drift away from sailing interest, any ten members can place their own slate in nomination, making it possible to return the club to its course.

These methods of control have provided us with the most active and able management that lies within the potentiality of our club. Each administration has seen a new, well selected governing body which has accomplished much with its ability, energy and fresh enthusiasm.

A passing comment is that most of our officers are youthful. The majority of our Commodores, for example, have been under 35 years of age. At first blush, it might appear that we would operate without benefit of mature judgment. We find, however, that youthful officers, carefully selected, are of the junior executive type. As yet they are not tied down by the responsibilities of senior executives. What they lack in mature judgment is more than made up in the time which they can devote to their offices and the fresh energy that is theirs. It is true that they can make more mistakes but their activity most often counterbalances their errors, piling up an impressive box score of achievement at the year's end. What they lack in seasoned judgment can be replaced by mature counsel, which is willingly given.

Occasionally, as is the case this year, we elect an older man to the office of Commodore. When such men are chosen, it is a tribute to their active abilities as sailors rather than a recognition of their positions in civic and industrial life. This attitude is further proof of our single track minds and our belief that a yacht club should be run by, and for, sailors.

A clause in our by-laws makes doubly sure that our excellent boards of directors produce a full season's work. It provides that the board shall meet at least once a month. During the sailing season, the board steps up the frequency of its meetings. The required monthly meetings through the fall and winter, however, are highly profitable to the club. Although it might appear that nothing could be accomplished during those dormant months, it is surprising to note the number of plans, hatched in sub-zero weather, which develop into successful summer programs. The business transacted in this continuity of meetings impresses a board member with the importance of his duties. He takes his job more seriously and accomplishes more. In fact, our club never has to get started each spring. Since it never stops, all it has to do is accelerate its pace with the return of open water.

In practice, our by-laws have produced some interesting results. Our membership is limited to men only; their families are included in all social activities but the privilege of holding office and voting is restricted to men. Widows of former members, and women who have been particularly friendly toward the club, are given annually "Commodore's Memberships" which entitle them to the full use of the club at no charge. The women have an informal group which meets regularly, sponsoring dances and other activities. They accept their situation of having no voice in the operation of the club and content themselves with a policy of full coöperation in all our activities. Such proceedings make for a sailor's paradise.

"Idler III," a typical Class "E" scow, winner of the 1940 championship on Lake Chautauqua

Many of our girls are enthusiastic sailors. They add fine competition to our races and keep their boats in tiptop condition. While they have no voice in the club's management, they take part in the meetings of their fleets, contributing much to successful operation.

In many a club, the rocking chair fleet, comprised of locally prominent people with a scattering of retired sailors, holds the reins. Its interest being elsewhere, sailing struggles on in spite of it. As has been shown, our by-laws prevent this. The rocking chair sailor is a welcome member with us. He is welcome because we hope to interest him in our sport and we also appreciate his support; but we do not ask him to lead us. We try to keep our club so full of activity that even the non-sailing member feels that he gets his money's worth. Such a policy is good insurance against going stale.

One of our major attractions is the fact that we have developed into what is essentially a family club. Over weekends in particular, whole families spend all their time at the clubhouse. Children run rampant throughout the place. Their mothers sun themselves on the lawn. Non-sailors enjoy each other's company. Out on the water, the bulk of the membership is active — racing, sailing or cruising. We find that it is fun to have a place where the entire family can enjoy itself; where a man does not have that guilty feeling of deserting his wife and children; where we all have fun. We feel that we are laying an excellent groundwork, too, because the youngsters who play on the lawn today will be tomorrow's sailors and the active rulers of our club. They will be well grounded for their stewardship.

We have already watched a decade's crop of youngsters blossom into manhood with clean, wholesome characters fostered by the environment of sailing. They seem the most promising group of young men and women in our community. Sailing has kept their adolescent minds filled with constructive thoughts and high ideals.

(Continued on page 72)

Official U. S. Navy photos

A group of PT's tearing in to the attack behind a smoke screen laid by one of the flotilla

PT'S IN ACTION

How "Midway's Navy," a Hard-hitting Squadron of PT's, Played a Gallant Role in Reversing the Direction of the "Tokyo Express"

By HENRY S. PARKER,
Lieutenant, USNR

IT WAS a beautiful sparkling day, with the trade wind just a whisper. Four PT boats were lunging along over the easy going swells in a V formation leaving four boiling white trails behind them. The uniform of the day was skivvy shorts. Chow consisted of meat sandwiches on the bridge, and we'd been able to get some Coca Cola to bring along.

Jap subs were supposed to be out and our operation order said we were to stick out a week in the lee of a small island where they were supposed to be rendezvousing, and there was a possibility they might try to refuel patrol planes prior to an attack on Pearl Harbor. It was our job to make things unpleasant for them if we were lucky enough to surprise any. We had plenty of depth charges, and we'd dropped quite a few since the war started. But we had our own idea on how to get subs: to sneak around in good hunting areas at night and surprise one on the surface charging his batteries and then wham him with a torpedo.

We were getting pretty impatient. Everyone seems to when they're on defensive patrol work with nothing more tangible to shoot at than "alarums and excursions" which seem to dwindle to nothing from the intense satisfaction of "This time this is IT" with which we'd start out on an assignment.

December 7 was now five months behind us. We hadn't played much part in it, but we'd been there. Luckily, we had had our ammunition all belted and the guns already on half-load and we got firing pretty fast and felt pretty sure we'd knocked down a couple of the rats, anyway. Half the squadron had been loaded on a tanker about to leave for the Philippines, so they'd had to cut the control cables to the power turrets and have men outside pushing the gun barrels around aiming them while those inside did the firing. After the attack, we had milled around the harbor entrance looking for subs and waiting and hoping for the word that might give us a chance to get out after the Jap ships wherever they were, but the contact never developed. So that had been our active part in the war to date. Waiting and watching and hoping.

Here we were still, doing necessary jobs, I guess, but feeling pretty inadequate, especially since Lt. Bulkeley and the three others who got out of the Philippines had stopped in on their way through and told us what they'd been able to do there.

Since the beginning, we'd all felt that we were in the unfortunate position that planes, subs and, for that matter, destroyers and any new members of the hierarchy of naval equipment have always seemed to find themselves in when they are first developed as a new plaything, i.e., an unknown quantity that is something to be pretty skeptical of. Apparently we had disappointed some of the people who'd hoped that our 77-foot loads of TNT could go to sea in any kind of weather, stay there at any speed up to 70 knots, and in general do the work of destroyers in addition to being the answer to every problem of patrol and escort operations. Oh yes, there were even those who felt we should qualify as a striking force that could go anywhere faster than anything else afloat!

We couldn't do those things, certainly not continuously. We'd been guinea pigs, both before we left the Atlantic coast and then again when we got to the Hawaiian Area.

On opposite page: A corner of Gloucester Harbor in the springtime. From a photograph by John Kabel

Fueling a small boat at sea is always a problem. Here a PT ranges up alongside a supply vessel

One of these experiments probably bears telling. The squadron was ordered to see how fast they could get to Molokai and back from Pearl Harbor. If you've ever cruised around the islands, you'd know the reputation the channel between Oahu and Molokai has. Rough, choppy, and just plain nasty if the trade wind is blowing at all. It was blowing that day, about 30 knots of it, and we did quite a bit of pounding. The boat on my starboard quarter claims to this day that they once saw Diamond Head under our keel.

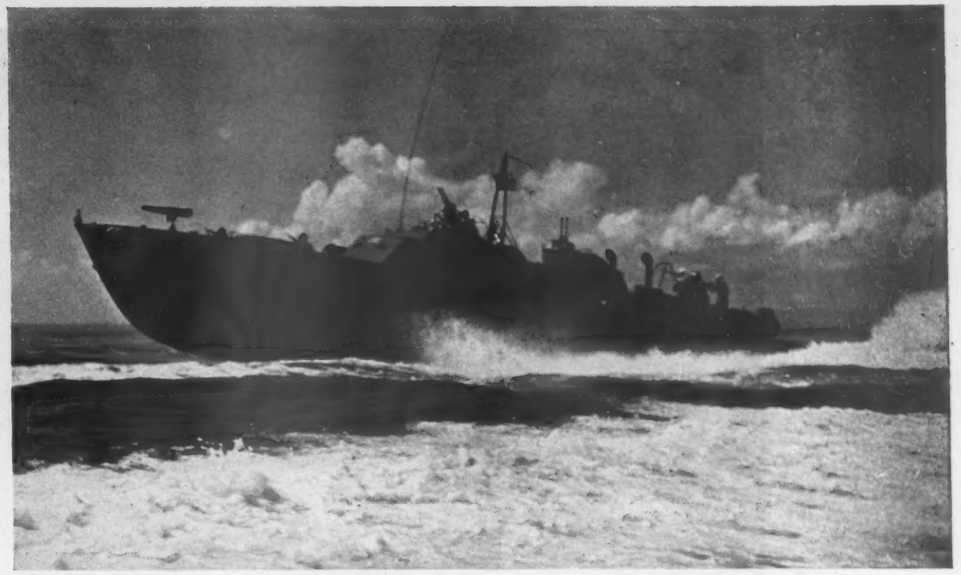
We had plenty *pilikea* — (Hawaiian for trouble), and a few casualties. My gunner's mate tried to push his nose through the deck when I sent him below to have a look at the bilges. The deck didn't give the way his nose did. Now we've learned not to allow anyone forward when it's choppy. Two men on different boats put their heads through locker doors (the doors were closed), and one man was thrown up against the overhead so hard he was in the hospital three weeks with a bad back. We always tell that one when the old-timers start their sea stories about washing footprints off the overhead after typhoons in the China Seas.

So, as a result of this experiment, the quite naturally skeptical senior officers, surveying the results, decided we were not quite as good as the blood-and-thunder PT boat articles claimed. Again the problem of what the hell *were* we good for came up, just as it had with both subs and planes when they were first developed. We thought we had the answer, that we might do some good as an opportunist striking force. That, given available targets, we could sneak in pretty close at night and fire our "fish" before we were spotted and stopped with gunfire. In other words, we felt we had a pretty potent weapon in our torpedoes on a defensive-offensive mission — on offensive patrol, during reduced visibility when torpedo planes would be badly handicapped, in an area where enemy shipping could reasonably be expected.

Lieutenant Commander William C. Specht, our squadron commander, had arranged a couple of exercises against our own task forces. On one of these, we got so close to the carrier that we could hear the echo of our engines off her side before we were spotted. All in all, these exercises were so successful that we felt as if we really did pack dynamite, given the opportunity to use it. But enough background. We were now looking for subs and having a pleasant week. At anchor in the daytime, good food (we could cook at anchor), some fishing, much sun bathing and swimming. There was target practice every day, and patrols around the island at night. Our semaphore got pretty good; there was always someone exchanging wisecracks back and forth while we were at anchor in the daytime. None of our subs had materialized though we all made a run one night on Venus. I guess everyone goes to general quarters at least once in his naval career over Venus; it looks pretty ominous hanging on the horizon when you're expecting something. The morning of the last day, we were getting set for the trip back to Pearl when we got a radio message. "Proceed to Port (—), fuel and provision and rendezvous with remainder of the squadron at latitude umpty, longitude ump."

The prospect of home and hot baths vanished and, instead of Pearl Harbor, off we went in another direction and took care of our fuel and provisions. The rest of the day we spent rolling suspiciously rusty looking drums of aviation gasoline around and getting our thirsty boats filled up. About 3:00 that afternoon, we were underway again, except for one boat with a much chagrined skipper and a defunct gear. At 5:30 we were at our rendezvous; nothing there. But, just at sunset, the low silhouettes of the rest of the squadron showed up and we all closed to hailing distance, bobbing around apprehensively with much backing and filling of our Packard engines while we heard the dope. Lt. Clint McKellar, our squadron commander (Lt. Comdr. Specht was back in the States, organizing the PT boat training center), was pretty short about it. "Here are your orders: we're going to Midway, keep your division closed up." He tossed over a packet of charts and instructions

Planes and PT's team up in search of the elusive sub



Armed with machine guns, depth charges and torpedoes, this fast "mosquito boat" packs a punch

and we were off. Off for a pinpoint some 1,100 miles to the west of us in eleven 77-foot cockleshells.

After we'd swallowed our astonishment a bit, we settled down to what was going to be a pretty familiar routine. The wind was behind us, so the going was pretty easy. The crews could even sleep up forward. The man at the helm and the officer on the bridge with him didn't have much to do except keep the throttles juggled to keep the engines synchronized and the boat in position. That old cruising feeling of complacence and quiet settled in. Look around and try to count all the boats in formation in the dark and just keep heading west. It got pretty dark.

Blinker from one of the boats astern. "Fuel trouble, can't keep up." We speeded up and circled back to investigate and found the skipper of that boat fit to be tied. "Water in my blankety-blank gas. But I think I've got it licked now." And so back into formation. About one o'clock, a black squall chased up on us from astern and it got so black that we couldn't see anything but the boat we were keeping formation on and the boat keeping formation on us. When that blew over, we got a message from the squadron commander to round up and count all boats in formation, so we speeded up and circled around counting noses. It was pretty confusing in the darkness, the formation was a little ragged and boats would appear from unexpected directions. All we could count was eight boats. That's all there were. Next morning, there wasn't a sign of the other three. One of them was the one that had the water trouble, so we figured he'd had more trouble and dropped back with the two boats keeping station on him.

As soon as the sun got high enough, we had a chance to look around our fleet and see what we looked like. There was even our supply officer (he'd been qualified as a PT boat skipper) at the helm of one of the boats, wearing the same hat he must have knocked 'em dead with wandering down Elm St. in New Haven. We broke out sextants, chronometers and *Air Almanacs* and worked out our morning suns by brute force. We were all pretty rusty with the sextants, for up to now we had only needed to limit ourselves to piloting. Noon positions came much more easily and much nearer the same spot in the ocean, and the cobwebs were beginning to clear as to starfinders and sidereal time and such before the afternoon was over.

We had light rain squalls every once in a while, which meant we would have just as much water in our sleeping compartments and engine rooms as on deck. We hadn't been guinea pigs for nothing, and the decks were pretty well opened up. Late that afternoon we were supposed to rendezvous with some YP's which had more fuel to keep us filled for contingencies but, when we got to the spot, no YP's. YP's are the converted tuna clippers which the Navy had taken over from San Diego, usually with their old fishing skippers and crews almost intact. They're the boats which have done such heroic service at Guadalcanal. The marines who've been there can't say enough for their rugged skippers and crews, which were mostly Portuguese-Americans, who had enlisted because someone told them they were needed.

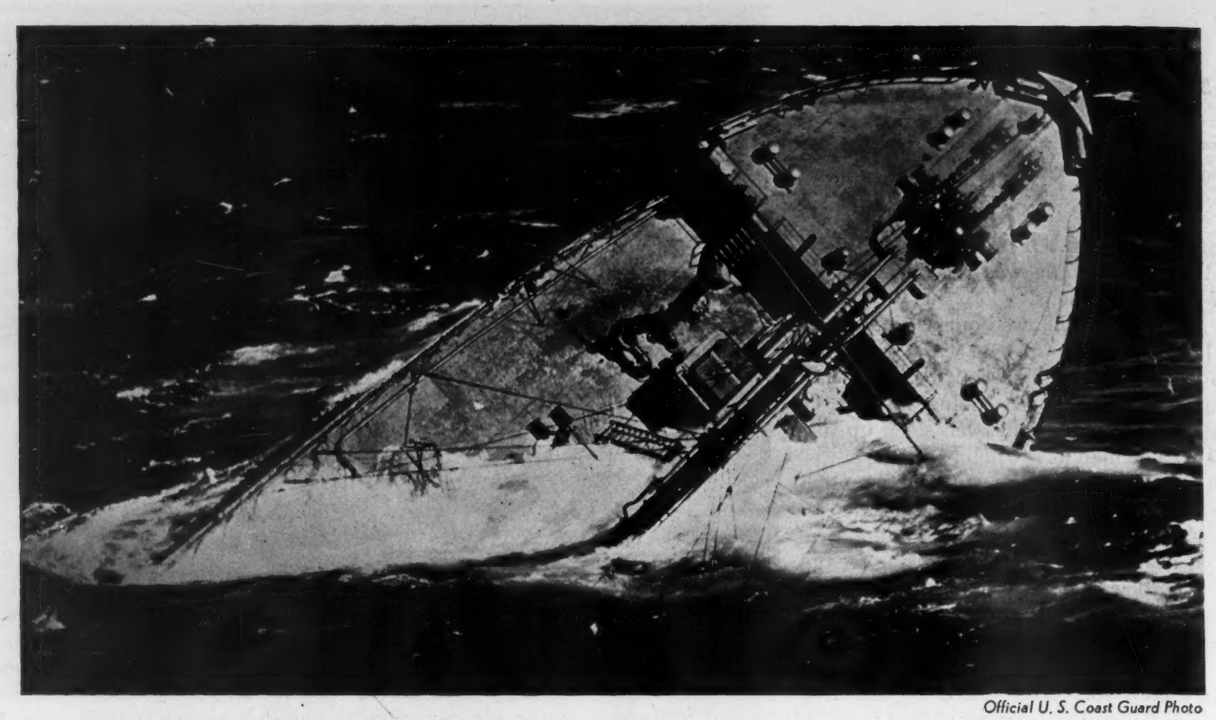
Next day we lay to and fished, waiting for the YP's and the other three PT's, which we were beginning to worry about. Late that afternoon, through the murk of a squall to the south, we spotted what we thought was a ship. As we closed on it, we could see the YP's and the missing PT's.

As a result of the difficulties in keeping our rendezvous, it was decided to have us accompanied for the rest of the trip by one of the AVO aviation tender destroyers which could fuel us easily at sea if necessary, and which it would be easy for us to keep station on at night, so we remained at our rendezvous that day, topping off from the YP's gas drums.

That night the AVO showed up and we got under way again. It was a lovely night, the moon was out, and there was a gentle breeze behind us. The rest of the trip was beautiful, and it made some of us wonder why the Navy Department actually wants to pay us for giving us the chance to be out on such an idyllic busman's holiday. The boats were magnificent. The 33 Packard engines pushed them along without a grumble except over the occasional slug of water and corruption that clogged up our strainers from the gas we'd taken out of the drums. There were compensations for being monkey-wrench sailors. Running low on bread? Just range up alongside the AVO, and they'd toss over a loaf or two to us.

(Continued on page 90)

The ubiquitous PT's are sometimes used for convoy operations



Official U. S. Coast Guard Photo

A moment before the end! Merchant vessels have been known to go down in an extremely short time which means that all lifesaving gear must be so designed and stowed that it can clear the ship with a minimum of delay

LIFE BOAT PASSAGE

Wherein a Deep Water Yachtsman Discovers That Commanding a Life Boat in Mid-Atlantic Involves a Degree of Seamanship Not Normally Required in a Bermuda Race

By GEORGE G. BREED

"KEEP away from the ship," warned the submarine captain as his buff-colored monster pushed her ugly nose into the choppy sea and drew away from our life boat. "I intend to use artill-éry." His pronunciation of the word would undoubtedly have inspired W. S. Gilbert instantly to reply: "A plague on this va-gary. You'll now use artill-éry."

We had suspected he was up to no good when he surfaced a hundred yards or so from us as we lay alongside our ship, rolling about in the Atlantic swells and abandoned after her bow had been blown off by a torpedo. So we took his advice. Indeed, we immediately proceeded to widen the gap of water between ourselves and the ship as much as possible, for we were aware that just one round of his "artillery" might produce a chemical reaction in that cargo of ours that would be as violent as it was sudden. He didn't have to plant many salvoes in that cargo and, soon after he opened fire, her stern disappeared beneath the waves.

So that was that. It was up to us to "smell our way to Gloucester" — or to the nearest land. This was the Azores, the submarine captain had told us in reply to our question. We had been torpedoed at night, and it was now the next day. The sky was overcast and the wind light from the southwest — fair for a course to the Azores. The sea was sufficiently choppy to preclude any beautifully rhythmic performance at the oars, but not heavy enough to cause discomfort. The air was mild and the water by no means numbing.

(*The author is a well-known Atlantic coast yachtsman. Although a graduate of the Naval Academy, his desire for immediate sea duty inspired him to leave civil life and to join the Merchant Marine as a Second Officer early in the war. With becoming modesty, he here describes an eventful life-boat passage, but does no more than touch on his own outstanding conduct, despite a serious and painful injury which all but immobilized him.* ED.)

Through a lucky circumstance, we had been able to go back aboard the derelict ship some hours before she finally went down and had supplemented the equipment of our life boat with a number of extremely useful accessories: a sextant, a chronometer, navigation books and the ship's standard compass. The latter was a particularly valuable item in a steel life boat, for with its 7½-inch card it was obviously much less subject to deviation than the 3-inch model provided for the boat.

The submarine having made off, we set about taking advantage of the fair breeze. But the boat's sail was not to be found. Unfortunately, the boat had been swamped on lowering and had lain awash alongside the ship for half an hour or so, in which condition we boarded her from the raft in which we had left the ship. During that time I imagine that the sail had floated off. Although it was in a bag of fairly heavy canvas, I suppose the bundled-up sail had enough air trapped in it to give it buoyancy. So it was probably somewhere to leeward drifting into limbo along with the rudder, which (among other things) was also gone when we boarded the boat. Fortunately all of the oars — one steering sweep and eight standard oars — were still there. Also, we had the mast. We stepped it and rigged the shrouds and forestay, and then looked over the possible substitutes for a sail. The obvious one, which we proceeded to hang up, was a tan-colored weather screen of fairly heavy canvas.

The standard rig for these life boats is a jib and mainsail, the latter being gaff-rigged with no boom. We laced our jury

Wide World

Eight men in a 30-foot life boat seeking the nearest landfall or rescue by any passing ship. This picture was made by a member of the crew of a torpedoed American merchantman

sail to the gaff. Being somewhat longer than the gaff, the outboard corner hung and flapped loosely like a bloodhound's ears. This was accentuated by the fact that the "leach" of our sail — which had, after all, been cut for a different use — had an angle in it which ran out to second base and back to third. So we had two clews. For the benefit of those who like to experiment in sail design, let me say that two clews are as necessary and useful in a sail boat as two rudders.

In general, our ersatz sail reminded me of a suit which a friend of mine bought in Liverpool during the last war, after being torpedoed. It fitted him swell, all but the coat and pants. But, combined with the oars, the sail gave us steerage way, and a little steadier motion.

There were two other life boats in sight. Both these had set their sails and borne off to the northward, but one — Number 3, in charge of the boatswain — hove to, to "gam" with us as we lumbered after her. We came alongside and I took five men out of her, bringing the number in our boat to 14. Before leaving the ship, I had determined with fair accuracy the course and distance from the point at which we had been torpedoed to the center of the Azores, and gave this to the deck cadet who was to be the navigator for No. 3. We passed over to them some of the cigarettes we had collected on the ship and then stood off on our course for the Azores. We had agreed to keep together, which obliged No. 3 to heave to at frequent intervals. She gradually drew ahead, was a red blotch on the horizon at dawn, and disappeared later that morning.

Hoping to add a tenth of a knot to our speed, we took another rectangular screen — about the proportions of these long, useless pieces of lace they put on a dining table — and rove it on the forestay, as a jib, but it was quite useless. We were considerably handicapped in adapting the canvas to our immediate needs. Apparently while the boat lay awash alongside the ship a sea had smashed the locker containing emergency equipment and strewn its contents in the bilges or on the surface of the water. Among these was the sailmaker's kit which was now not to be found.

The following morning I took some sights. It was something of a shock. After the experience I had had as a navigator on ocean races, I thought celestial observations in a small boat would be as easy as a ride uptown with the Fifth Avenue Coach Company. But even in light air the yacht is a far steadier platform than that life boat was, and I had to work at it a long while before I could catch the sun as it danced about the horizon. I finally got a fairly consistent sequence of sights that gave a longitude. This I later crossed with a latitude sight which was only fair, as it had commenced to blow late that morning and the boat was already bobbing about "like a cork," as one of my companions put it. "A what?" said I. "A cork, a — cork." This particular expletive so generously flavors the American merchant mariner's conversation that he comes to feel that no object is adequately described without it.

The fix showed us a few miles northeast of the ship's last position. As I knew that our last fix on the ship was a good one and that we had not travelled far since then, these sights served chiefly to reassure me that sextant, chronometer and technique were probably adequate.

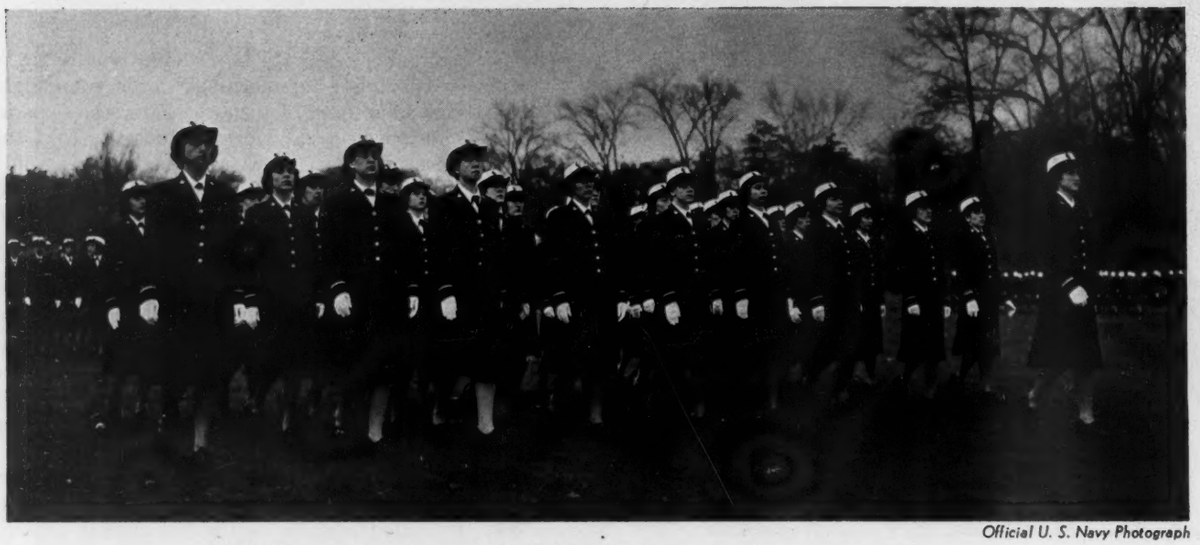
We had spent the previous afternoon in inventory. In most respects we were exceptionally well provided for a long voyage. We had supplemented the uninteresting standard rations with two and a half crates of delicious Florida oranges and a crate of the tastiest, juiciest apples I have ever had. These, especially the apples, were wonderful thirst-quenchers.

The water situation was also reassuring. Besides the two metal tanks built into the boat, we had picked up on the ship two wooden water breakers. Another comforting accessory was a complete outfit of blankets. Besides the six which were part of the boat's equipment, practically every man had brought along at least one blanket in our second abandon-ship. In fact, we sat upon great mounds of blankets, a good part of which I had been obliged to drop into the Deep Six, as they seriously interfered with the management of the boat and an inventory of its equipment. Later on, they were followed by the bulky suitcase containing the portable transmitter. I was loath to do this, but it occupied a space into which a man could squeeze himself for a few hours' sleep. Besides, the ship's radio operator, whom I had taken from No. 3, had declared emphatically that it "wasn't no damn good anyway."

(Continued on page 82)

Wide World

This photograph tells the story of the rescue of eight survivors who were first sighted by a U. S. Army plane which thereafter notified the Navy's blimp patrol. Note the small sail being lowered



Official U. S. Navy Photograph

WAVE ensigns in training at Smith College, Northampton, march in a regimental review

"WE JOINED THE NAVY . . ."

By LT. (j.g.) ISABEL DeC. PORTER, USNR, and ENS. FAITH MOFFAT, USNR

SEEING is believing when it comes to the WAVES. Much has been published about us in the newspapers, about our adoption of Navy lingo, our schedules — in fact, everything but the way we feel about our careers in the Navy to date. Who are these strange creatures in skirts who have so rashly invaded this Man's Navy? The men are torn between amusement and apprehension, and our hearts have been in our mouths more than once. But our backs are stiff and straight from military training — or fear — and we're out to do a job or die trying. However, it's a little disconcerting for some of us to have to maintain as our motto: "Join the Navy and Stay Ashore," when what we really want is to go to sea with the rest of the gang. The only thing that stops us from applying for sea duty (besides a few Congressmen) is the vision of what would occur on board ship were a female to appear on the quarterdeck reporting for duty. We're good, but not that good. . . .

Actually, we expected to be shoved about a bit by the venerable guardians of Navy tradition but the signs saying "Men Working, Keep Out" were not as prominent as we thought they would be. Of course, everyone is still somewhat confused as to whether to treat us as "officers-and-gentlemen-by-the-Act-of-Congress" or as ladies. At training school, we were put through the usual obstacle race set up for budding officers, and didn't get a chance to consider anything. Now, however, from the vantage point of a desk in Washington, we find that we are treated with the utmost consideration by everyone. That is, after the initial shock of finding a girl where a man should be has worn off. At first, we were curiosities but gradually the novelty has dissipated with the increasing influx of WAVE officers to the Bureaus, and we don't get any attention at all, particularly. We are just "one of the boys" during working hours.

Training school is remembered with mingled feelings. We worked hard, mentally and physically, but incidents in our daily routine which at the time were a source of forcible swearing (under our breath, of course) have since been recalled with nostalgia. To gripe aloud a bit is, after all, one

We were a couple of seafaring women and had done a lot of cruising in Commander "Sandy" Moffat's "Raccoon" and Lieut. (j.g.) Isabel DeC. and Lieut. Burnham Porter's "Roarin' Bessie," seen here at a rendezvous of the Cruising Club of America at Cohasset

Albee Studio

Ensign Faith Moffat

Lieutenant (j.g.) Isabel Porter

of the signs of a happy ship and, to be honest, we enjoyed every minute of it — though such an admission would have hurt our pride a few months ago. As a couple of old seafaring women, we were better equipped than most for the experience of making up an upper bunk. Even with five roommates, it was a cinch compared to the many times we had made up a bunk in *Raccoon* or *Roarin' Bessie* with at least that many people swarming over us and up the companionway. The trick was to avoid kneeling on the part of the bunk you had already finished, and to fight off the horde until the rest of the "Irish pennants" were secured. We were prepared for a lot, but not for the agony of those sub-zero New England pre-dawn risings, when at 0600 we rolled out of the upper bunk on to the bare, icy floor. We never did perfect the technique of sliding with one motion from the bunk into our bedroom slippers but we have some beautiful bruises to show that we tried.

After several weeks of training, we began to feel as if we were on an assembly line. At any time we expected to be told, if they told us anything, that at the next stop we were going to be simonized, or have a new fender installed. We were always in ranks or studying, except for the precious hour a day of liberty. At meals, we lined up by platoons and had food dished out to us cafeteria style, on sectioned tin trays. The food was delicious and plentiful, which was just as well because most of us had never had as much exercise in our lives. Certainly, none of us had ever marched over eight miles a day as we did up there in Northampton, and we were always hungry. Some of the girls gained weight on the routine, and some lost it, but we all redistributed it noticeably. In some cases, this wasn't such a bad idea. The idea of anything as luxurious as diet occured to extremely few. In spite of typhoid and tetanus shots and long days of hard work, most of us felt like a million dollars.

The shots we received every week were a real example of mass production. The doctors were skillful and impersonal and managed to shoot as many as fifty-six arms full of serum in seven or eight minutes. Before the first shot, while waiting outside in ranks, a couple of the prospective officers turned green and had to be attended to. We soon caught on to the psychology of the situation, however, and from that time on sent them up to the head of the platoon so they didn't get a chance to think about fainting until it was all over — and then it was too late. We heard one girl arguing with the doctor as to the advisability of having her smallpox vaccination on her leg rather than on her arm, because it would show when the War was over and she would be wearing evening dresses again. The doctor won. She'll just have to resign herself to wearing sleeves for the rest of her life!

Those Wednesday morning trips to Sick Bay taught us a lot because we learned to be impersonal about ourselves. What we thought, individually, was relatively unimportant; we were learning to be part of a military organization. The very fact that we were "cogs in the machine" for a short time will prove a valuable complement to our individuality as officers. The shots disciplined us in more ways than one but when we consider, in our thoughtful moments, the amount of active germs that were running rampant in our blood during the entire training period, we wonder how the human system can carry on fairly normally under such circumstances, as it did.

Although our routine was pretty strict, we usually managed to find humor out of even the most heartbreaking instances. The time we were told to open ranks for hair inspection was one of these. We stood at attention for about twenty minutes, while the Drill and Discipline Officer went down the ranks from behind us, saying, "Cut . . . trim . . . messy" etc. Many long cherished locks had to be chopped off before the next day, or leave was forfeited. After a day of this, we finally posted a paper bag on the first deck of the hotel with a sign indicating that contributions of hair were gratefully received. By nightfall, three more bags had to be added.

We had all kinds of inspections, even to inspection of our long woolen underwear, which had to be properly marked and laid carefully on our bunks. Our superiors had decided that the Drill Field was too cold for us little flowers so we wore "snuggies." We weren't proud of them, but we were warm. Captain's Inspection on Saturday mornings was a most formal affair. Everything was stowed neatly; if we couldn't find room anywhere else, we'd stuff it under our pillows. The slightest grain of dust, even if found on the top of the door or over a transom fixture, was counted against us. Our bureau drawers had to be open in tiers, so that they could be inspected at a glance. Each article was placed with the fold toward the front, all shoes in the lockers were placed with the toes facing out, laces tied. We stood at attention for the entire time the Captain was on the deck, like well-behaved little ninepins, our eyes straight ahead, stocking seams straight, hair off the collar, hands along the seam of our skirts. One disconcerting incident happened when one of the inspecting party took a little plump blonde girl to task for not standing at attention. "Your heels should be together, toes at a forty-five degree angle," he ordered sternly. "I'm sorry, Sir," she ventured

(Continued on page 74)

Captain's Inspection. The slightest bit of dust, even on top of a door or over a transom fixture, counts against the occupants of a room

SAFETY AT SEA

Merchant Seamen Are Now Protected Against the Hazards of Unrestricted War at Sea by Life Saving Devices of Ingenious Design and Construction

By CRITCHELL RIMINGTON

"SAFETY AT SEA" — few are the phrases more meaningful or of graver implication to the mariner than these three words! And the many months of unrestricted warfare at sea have given an even greater emphasis to this subject since no ship, either a warcraft or merchant vessel, clears port without each and every member of her crew realizing that she may "catch it" any moment.

"How long does it take a torpedoed merchant vessel to sink?" is an oft repeated query. Briefly, vessels with a high degree of subdivision, when struck by a torpedo or torpedoes, normally take longer to sink due to the restriction of the water flow fore and aft. However, the type of cargo and condition of the ship are pertinent factors. Cases have been known where ships were, for all intents and purposes, *sunk in from one minute to one minute and a half!* In other instances, even though the damage was extensive, the vessels took several hours to go under. Many vessels have been brought to port by their crews after being torpedoed, where they are repaired and go to sea again.

Today by reason of rigid governmental requirements, every coastal and ocean-going freight and passenger vessel of American registry is provided with the most modern and efficient types of equipment specifically designed to save the lives of her passengers and crew. These many products, ranging from new type life boats to castaway fishing kits, are all examined and considered by the Merchant Marine Inspection Division of the Coast Guard and passed upon by the Merchant Marine Council before they are finally adopted.

Safety at sea under present wartime conditions is handled by two different federal agencies. The War Shipping Administration handles safety education as part of its training program through the Merchant Marine Cadet Corps and the U. S. Maritime Service. The Coast Guard is responsible for the vessel, her equipment and all safety devices used aboard, including the life boats and rafts. The Coast Guard also specifies the minimum number of officers and crew for the safe operation of the vessel.

Press Association

Drifting on a life raft and near exhaustion after many days afloat following the torpedoing of their ship, these sixteen men were rescued by a passing Coast Guard cutter

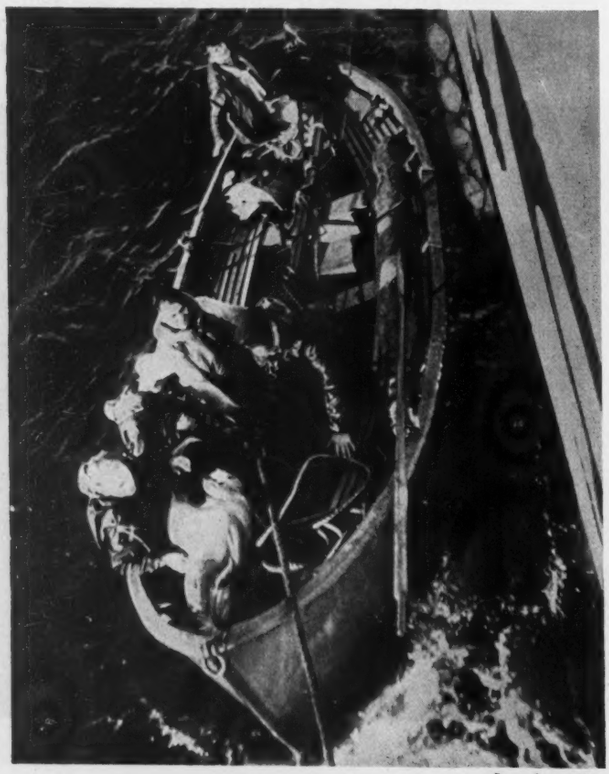
What is perhaps the most comprehensive and authoritative publication on the subject is the Coast Guard's recently issued book *Wartime Safety Measures for Merchant Marine.* Its many pages of text and diagrams are based on the varied experiences of those merchant seamen who have saved themselves by ingenuity, courage and sound seamanship. The material has been supplemented by a digest of information obtained directly from foreign regulatory authorities and from masters, officers and seamen of American, English, Norwegian, Dutch, Belgian and other United Nations vessels, as well as notes taken at investigations of casualties occurring to American vessels during the present war.

This remarkable publication is a one-volume encyclopedia of practical protective measures for the wartime mariner. It covers everything from signaling mirrors to emergency provisions, and includes basic instruction in first aid, deep sea fishing, swimming, and the most approved method of carrying on an interesting conversation with South Sea Islanders. There is even included a gastronomical dissertation on the most effective method of broiling grasshoppers!

Not only does this book (a copy of which goes to every officer and member of the crew of all American merchant vessels) provide a graphic evidence of the steps being taken to safeguard life at sea under almost every known condition, but of particular interest to the yachtsman is the fact that few topics mentioned do not have practical application to small boat operation. And it is a safe assumption that much of the equipment now found in the modern life boat or life craft — such as dehydrated foods, life jackets, containers, first aid kits and so on — will be adopted by the cruising yachtsman when the war is over.

\+ + +

Something has at last been done to modernize the prewar, conventional type life boat. As announced by the

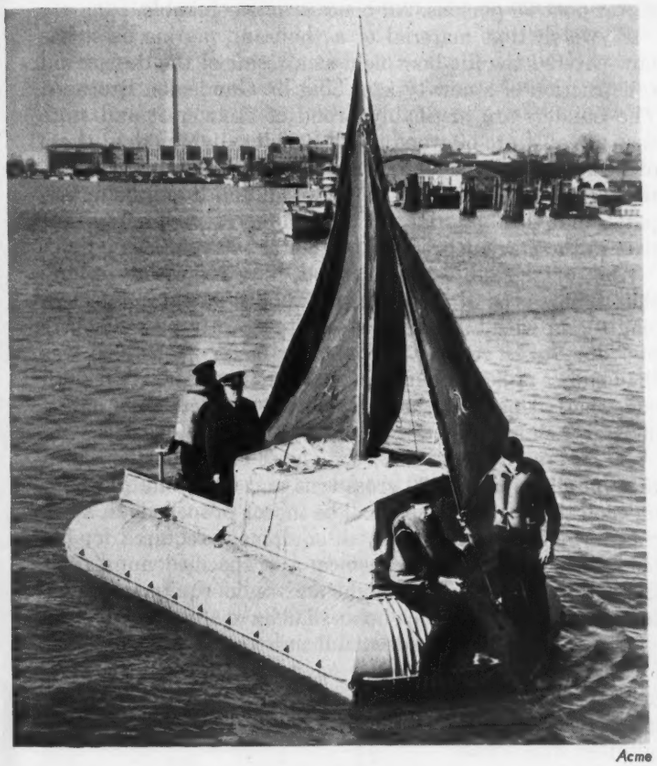


Press Association

Getting a life boat clear of the falls and away from the ship is one of the most hazardous operations when abandoning ship — particularly in heavy weather

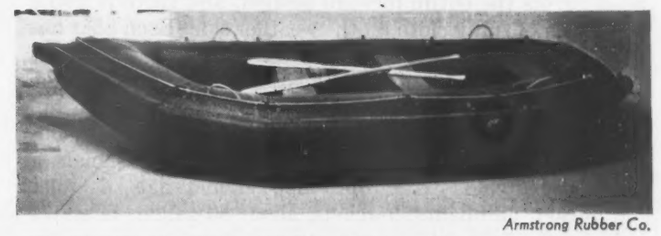
United States Rubber Co.

Frank Morrison & Son



Acme

Watertight Slide Fastener Corp.



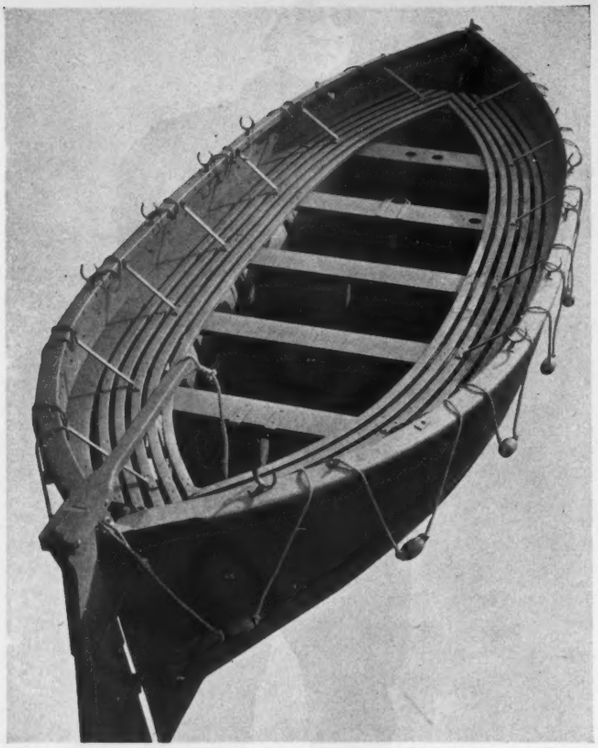
Armstrong Rubber Co.

Winner Mfg. Co.

Winner Mfg. Co.

BOATS, RAFTS AND SUITS—BY THESE AND SIMILAR LIFE SAVING DEVICES MEN LIVE TO TELL THEIR TALES

Modern life saving devices are arresting examples of man's ingenuity. The modern rubber life raft and life boat have proven seaworthy, maneuverable and capable of carrying astonishingly heavy loads. Built in every conceivable size and shape, they are now employed by all of the armed forces as well as the merchant marine. Among the other recent developments are life rafts built of metal, life boats propelled by manually operated propellers and life suits which keep the wearer not only buoyant but warm and dry



A modern plywood life boat. Note the tanks on either side and the breakers under each thwart. Gunderson Bros.

National Council of American Shipbuilders, the "Liberty ship" type life boat is designed to carry from 25 to 31 persons. Built of wood or metal, she incorporates some of the best features of the old whale boats. An undamaged Liberty life boat cannot be swamped, because she has numerous buoyancy tanks; if high seas capsize the boat, she can be righted readily by a few men.

Each boat is equipped with a canvas spray hood. This hood covers the entire forward section, and there is also a full length of spray cloth on the weather side. Each boat has red or orange sails and a mast topped with a six-foot streamer of orange bunting to aid identification at sea. At least one boat on each side of the vessel is equipped with a 25 hp. motor and a liberal supply of fuel. There is also a full complement of oars. Rocket pistols, flares and smoke signals, a compass, matches, extra rope, first-aid materials, a bailer and bucket, flashlights, hatchets, about 80 gallons of water and supplies of food in concentrated form are carried in watertight containers.

Although this type boat shows a marked advance over the early models, one fault is still to be found with her, and that is the matter of propulsion. As will be noted elsewhere in this issue ("Life Boat Passage" by George Breed, page 26) both oars and oarlocks may snap under hard treatment and in heavy seas. Hand propelling gear, which permits a propeller shaft to be turned by the boat's occupants pushing hand levers back and forth, may be the solution. This hand-driven life boat carries the same equipment as the oar-propelled type, whereas the motor-driven life boat requires considerable additional equipment, all of which utilizes valuable space.

The principal feature of this type of boat is the driving mechanism with a direct drive worm gear unit, with balanced flywheel and marine reverse gear. This permits continuous one-way operation of all stations, regardless of direction. The operation is extremely simple and requires no skill or experience; with 40 strokes per minute, the mechanism turns a 20-inch diameter three-blade propeller at 200 r.p.m. to obtain a speed of approximately six m.p.h.

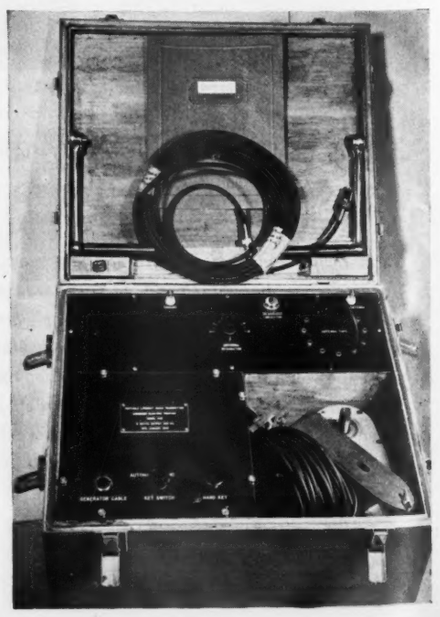
Among the many American firms which are building life boats, some have really made production history. At the outset of the war, and in the absence of any standard design of life boat that would fit in the vast program for the building of Liberty ships, the one corporation (which until then had been a manufacturer of stoves), submitted plans for a boat of its own design. Being awarded the prime contract, work was started before Pearl Harbor with a production schedule calling for two boats a day. Today 144 boats a week are being shipped!

Today's Liberty ship calls for life boats on each side of the vessel having capacity to accommodate the entire crew required and, in addition, at least four life rafts of sufficient size to accommodate all persons aboard. In addition, at least two life floats are carried. Globe American ships these complete with all the required articles, including some of the following more important materials: masts with rigging; red mainsails and jibs, which color is visible at sea for rescue work; orange colored signal flag flown horizontally at the masthead (which color is most visible for airplane rescue work); approved bilge pump; food and first aid lockers hinged under the thwart; etc., etc. There are, in fact, about 60 items of equipment in each boat. The present life boats for the Victory fleet are 22 feet in length, 7 ft. 6 in. wide and 3 ft. 2 in. deep. They are all metal with diagonal 15 gauge plating. Under the present rating of 15 cubic feet per person, the oar-propelled boat has a 21-person capacity and the motor boat 25 persons. All boats are non-sinkable.

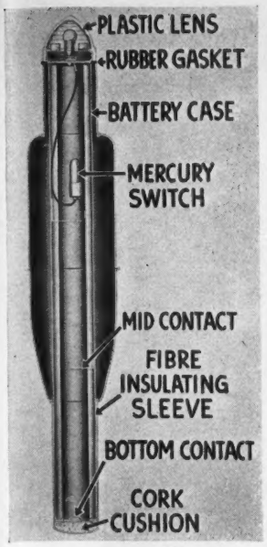
Plywood, that material of a thousand marine uses, has now entered the life boat field as a result of the design and construction of a new type of boat by Gunderson Brothers. The builders are justifiably proud of their craft and state that not only are plywood boats 1000 lbs. lighter than those of steel, but are much more easily handled. There is no question of the great strength of plywood, and it can be anticipated that this material will play an increasingly important part in the current program of greater safety at sea.

And, on the subject of plywood, it is interesting to note that a new type of 45-person plywood life boat, 24 feet in length and with a beam of 8½ feet, recently passed severe buoyancy tests. Among the demands made on the boat was the loading of 8600 pounds of sand in the craft. With both ends then suspended, the boat showed a deflection of only a quarter-inch amidships.

As of January 1st, 1943, the Coast Guard has specified that on all ships of 3000 gross tons and over, one life boat on each side of the vessel shall be motor-propelled. In addition to being provided with all equipment required for life boats, each motor boat must carry a specified number of fire extinguishers, a searchlight and radio equipment. It is further specified that such boats shall have a speed of at least six knots when fully loaded, and must carry fuel sufficient for 24 hours' continuous operation. Each motor boat is also outfitted with a mast and sails, with all necessary equipment, so that she can proceed after she has run out of fuel. The importance of motor life boats is self-



This compact case contains all the necessary apparatus for a portable, manually generated, life boat radio transmitter. Arnessen Electric Co.



The essence of simplicity — a 1943 version of an electric water light. Manufactured by F. W. Wakefield Brass Co.

evident; one of their most important functions is performing all manner of rescue missions when the vessel is on fire or oil on adjacent water is blazing.

\+ + +

Modern life rafts — and there are types of every conceivable size and design — are astonishing examples of man's ingenuity. In the years before the war, life rafts were nowhere near as well constructed or equipped as they are at present. Today, it's quite a different story. Wartime regulations now provide that passenger vessels shall be equipped with a sufficient number of approved life rafts to accommodate at least 25 per cent of all persons on board. It is also specified that carrying capacity shall not be less than 15 persons and that all rafts must be so stowed that they will immediately float free. They are built as well and are tested as severely as is the life boat. Constructed of wood, plywood or metal, they have safely voyaged the seven seas, and in many cases their passages have stretched into weeks. The rafts are carried at a 60° angle on varying types of skids and launching ways which provide quick release for rafts of all types and sizes. Many rafts can be automatically launched from the ship's bridge, and in all cases releasing mechanism can be freed at the raft's location.

It has recently been reported that Bubblfil, the new product being considered for Navy type lifejackets, has also been tried out in air-compartments of life rafts and life boats. This substitute for Kapok is such that it will keep either type of craft afloat, even though their air compartments may have been punctured by gun fire.

It is quite obvious that the old style life raft of whatever size cannot carry the same amount of equipment as a life boat, yet it is astonishing how much is provided in the limited space which is available. In so far as it is physically possible, such equipment is identical to that carried in life boats, but varies in both quantity and size. Newer type life rafts will probably carry the same equipment as life boats. Reports from survivors have indicated that certain supplementary equipment with which they had voluntarily stocked their raft was found extremely useful. This included a heavy-bladed fish knife, a sizable piece of light cotton duck rigged as a sail or used as a shelter from the sun, and a light pole or two which could be used in connection with the canvas. A metal hook of some kind was also found helpful in picking useful wreckage out of the water.

\+ + +

Although the heroic "voyage" of Eddie Rickenbacker and his crew has forever glorified the rubber raft, the history of its development goes back to the first year of the last war. Ralph Towne, now associated with the Armstrong Rubber Company, manufactured the Navy's first dirigible — the *DN-1* — in 1915, and at that time visualized the need for and possibilities of the rubber boat. After much experimentation and the manufacture of numerous models, he sold the first inflatable life raft used by the Navy to the Navy Yard, New York. Thereafter, the development of rubber boats and rubber life rafts moved slowly, and it is really within the past five years that they have come into their own.

Perhaps the most significant development has been the method of inflating the rubber case with CO_2. Yet the development is not entirely new for the same Mr. Towne used this same method toward the end of the last war.

Rubber boats and rafts now come in a wide variety of sizes but what is perhaps the most remarkable development in the use of rubber boats is the variety of equipment which they are required to carry. This equipment now includes a sail, and this has caused no little wonder and some amusement, for the most earthbound landlubber cannot fail to note that the average air-inflated rubber vessel would not be much going to windward. The purpose of the sail, however, is not so much to propel the raft as it is to control it, for one of the principal disadvantages of any rubber vessel has been its skittishness. It has now been found that both sail and oars do permit the occupants to have some control over direction, which, in heavy weather, is a most important consideration.

Rubber life rafts are principally employed by the air forces and, in coöperation with numerous well-known manufacturers, great progress has been made in perfecting these unique "vessels." One of the newest types has recently been announced by the United States Rubber Company. Measuring 12′ by 5′ 8″, and capable of carrying seven men, it carries a square sail, a tarpaulin which can be stretched over the entire crew, fishing kit, signal kit, first aid material, rations for 30 days, and water. Other essential equipment includes a sea anchor, bailing bucket, plastic hand pump, repair kit, knife and whistle. The top is orange-yellow for wide visibility and the bottom is blue to avoid attracting sharks. An interesting design innovation is that a horizontal bulkhead divides the boat into upper and lower chambers so that it will remain inflated though pierced by a shark or other object from the bottom.

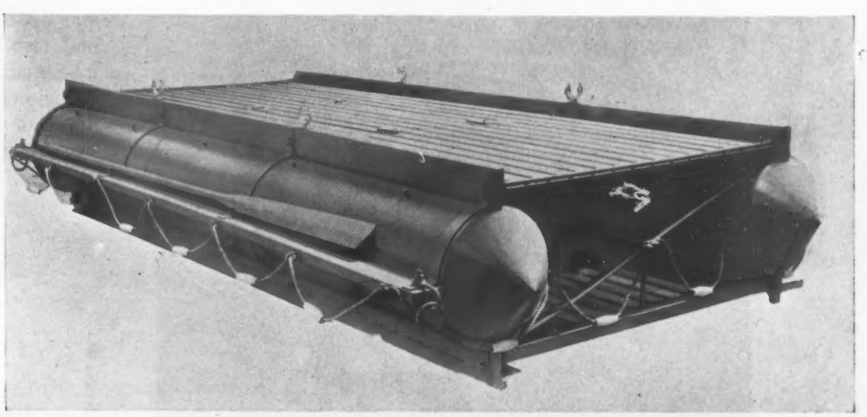
And for the record it must be stated that three Canadian flyers were saved from a watery grave by patching their badly ripped rubber boat with gum. Reads their report: "A knife slipped as the flyers opened the emergency kit and cut a half-inch gash in the rubber dinghy. Gas was escaping rapidly. Hastily, one of the crew produced a package of chewing gum. The flyers chewed madly, then sealed the gash with lumps of gum. They were rescued 31 hours later."

\+ + +

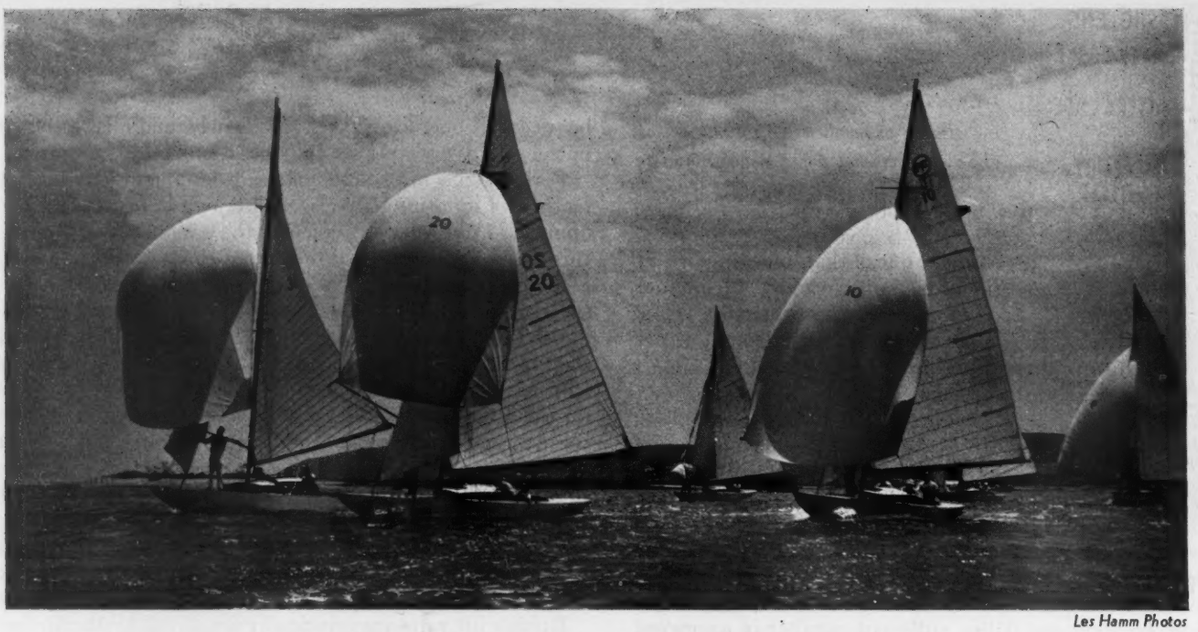
One of the major developments in lifesaving equipment to come out of the present war is the design and development of the rubber lifesaving suit. Although a certain amount of experimentation was done with such suits during the first war, it has been only within the last few years that they have become required equipment on merchant vessels.

These suits, made by various firms, in the early stages had numerous design variations. The Coast Guard, however, produced a standard specification and design which are now in use by all manufacturers of lifesaving suits. In appearance, they make you think of junior's feet-attached pajamas, except that the material is rubber and the helmet is

(Continued on page 88)



A metal pontoon life raft, which measures 14′ by 8′ 6″ and has a deck area of 84 square feet. R. H. Bozman & Bros., Inc.



Les Hamm Photos

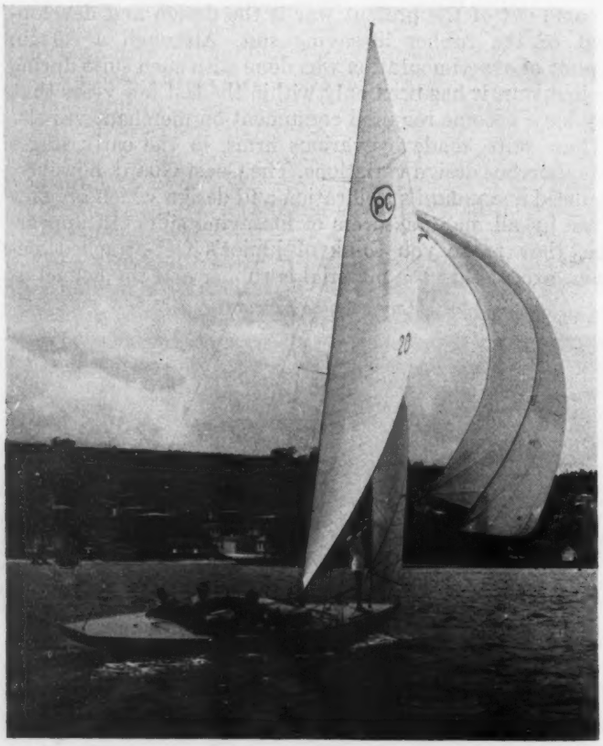
This active, democratic class has raced virtually every week for the past twelve years

THESE PERENNIAL PC'S

An Active, Progressive and Democratic One Design Class that Continues to Provide Fine Sport

By CURTIS ZAHN

THE ONCE lordly R Class was on the wane. As happens in many open classes, their zealous designers had outbuilt each other until, at the end, some of the gallant ladies no longer measured in the class and were ineligible to race without alterations. Self-bailing cockpits had given way to gaping holes in fragile decks; cabins were only places in which to store sails. Booms lost their healthy proportions and resembled nothing as much as mechanical equations for bridge stresses. No longer did those sleek bows and tapering transoms symbolize a seagoing craft. From a normal, healthy little boat, the "R's" had become racing machines, and twelve thousand dollars was a lot of money for just that — especially when yet another restless naval architect might come along and launch a faster and more extreme boat the following year.

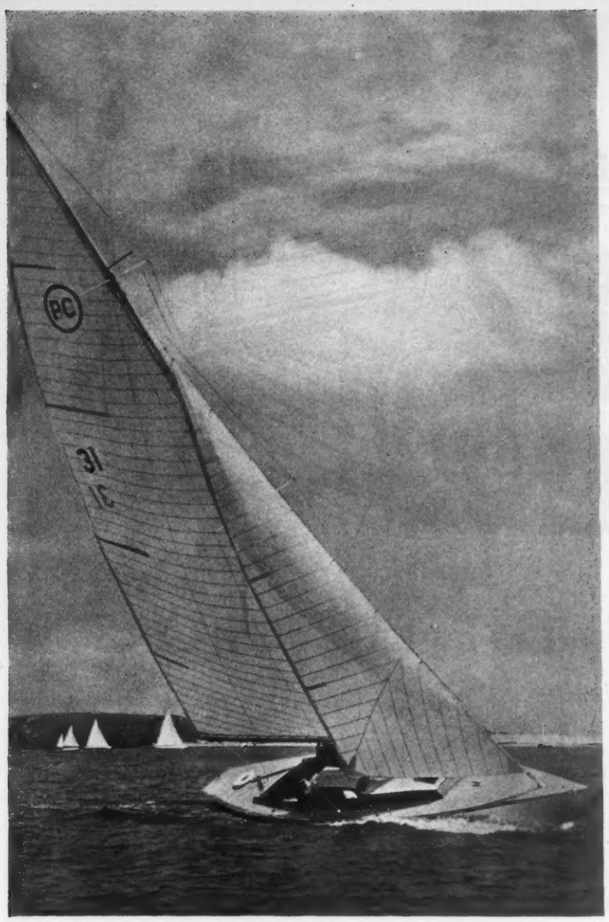


Gear and canvas are simple and sturdy and a permanent backstay makes for easy handling

The end had come gradually. But along with it, on the Pacific Coast, came a burst of desire for a one-design class that would be constant, both physically and financially. That was in the gay 1928–9's, the years when some coastal skippers were turning to "Sixes" and "Eights," hoping that the metre classes would provide an answer. But here again they were up against algebraic formulae and astronomical figures. Many nautical soothsayers foresaw this and began casting about for another class that more nearly filled their needs.

Such a group came from the ranks of San Diego yachtsmen whose hope was to introduce a racing fleet that would be neither outbuilt nor outsailed. It was an end difficult of attainment. For several years, the group had investigated various successful classes which had not yet appeared on the West Coast. The Atlantic Class sloops were an approximation of the idea but the hull seemed made for landlocked waters, being an open cockpit job more suitable for day sailing than for the open waters of the Pacific. Herreshoff "S" boats were another approximation of the ideal, but here again there were obstacles. The "S" boats were slow in choppy, open water, and much West Coast racing is "outside." Then too, the initial cost was twice that of what was believed to constitute truly democratic yachting. In the end, two types survived the elimination process. One was the 22-Square-Metre, imported from Norway especially for the occasion, and the other was a new hull that had been built by a new designer. This boat was later to become famous as the PC sloop.

The 22-Square-Metre was highly eligible. Her size and cost



The later boats with doghouse and other conveniences have proven just as fast as the original ones

were just right. Her ability on inland water was passable and her performance in rough water was splendid. There was but one outstanding fault. She was so greatly under-canvassed for the prevailing light airs of the Southwest that the new PC described effortless circles around her. Also, the "22's" were slivers and had neither comfort nor room. For this reason, the new boat was accepted. She had nothing of the dramatic in appearance, lacking the long overhangs and tapering ends of other craft. Nor did she have much in the way of accommodation other than two transoms. She was mainly a pleasing, composite picture of several types of craft, combining certain characteristics of all, yet not being outstanding on any one point. She was the type of boat that a novice might view with instantaneous desire — although, to some of the old school, the "PC's" lacked the exciting individualism of "R's" and "Sixes." She was a Buick instead of a Mercedes-Benz.

Nevertheless, four were built and, as Commodore Samuel Dauchy wrote in YACHTING in 1934, and as is widely known today, the 32-foot hull was surprisingly fast. The designer was George W. Kettenburg, Jr., an active San Diego racing skipper. The measurements worked out to 32′ over all, 21′ on the water line, 6′ 6″ beam, 4′ 6″ draft, and the sail area came to 385 square feet. While the first boats were built at San Diego, later ones were built farther up the coast at Newport Harbor, where Walton Hubbard was licensed to build them. In their first racing competition, they caught some of the "Sixes" after starting five minutes behind them. They trimmed some of the "R's," boat for boat, and twice won the coveted Lipton Handicap Sloop Trophy, formerly the exclusive property of the aforementioned classes. At Pearl Harbor, Honolulu, where four of them were taken for a team match, they raced against the S Class and won most of the rounds, whereupon the Islanders promptly purchased the four invading craft and they became a favorite class there. The PC's had proved themselves consistent under all conditions.

It was because the boats themselves were good that they attracted some of the best sailors in San Diego. Such men as George and Joe Jessup, William Lyon, Samuel Dauchy, and Walton Hubbard, of Newport, did much to make the Class successful. Good skippers always help a good class.

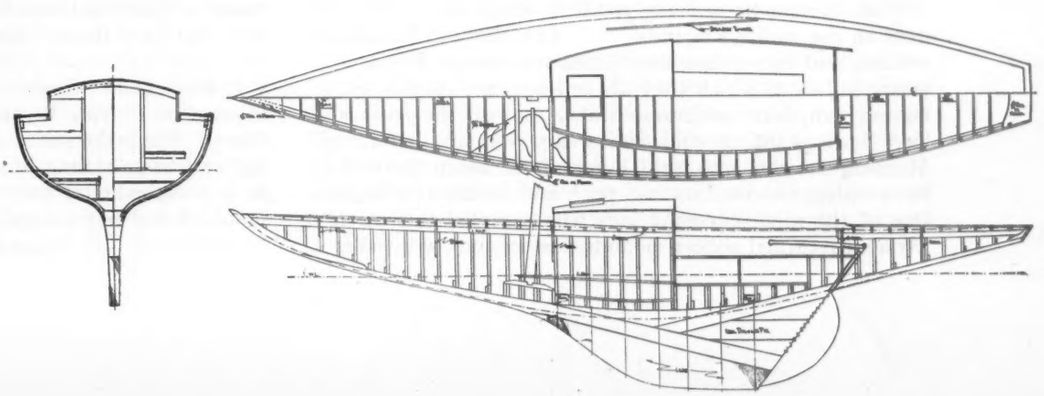
I have mentioned that these points are generally known. But the story behind the story of the PC's lies in the architecture of their rules and by-laws. As a class, the owners believe that they have staged more races per year than "anyone." For more than twelve years, the boats have raced virtually every Sunday on the calendar — plus Saturdays and holidays. PC Number 1 wins just as often as any other PC. PC Number 5 will bring as much money on the market as PC Number 35. The upkeep on this racing class is considerably less than it is in racing Stars. For those who want it, here is democracy, nautical style.

Many worthy classes have come and gone because an inch of leeway in design made a mile of difference. The Jeffersonian by-laws of the PC class were written by sea lawyers who knew this. Hull specifications are followed to the extreme — from wood to fastenings, cleats to winches, standing to running rigging. Enterprising builders are so carefully checked that virtually not one copper tack is left over. This has somewhat curtailed mass building but it has protected the owners. And, despite the all 'round performance of the craft, gear and canvas are simple, sturdy, foolproof. Permanent backstays make it easy for one man to handle a PC alone — and yet racing rules call for three or more aboard so that guests may enjoy the experience of racing. As a "pleasure boat," the craft has a deep, roomy cockpit with a good backrest.

There are other taboos besides those contained in building specifications. Rigging cannot be changed or "improved" unless damaged, but that's merely the beginning. Each fleet bears down on upkeep by limiting haul-outs to one per month during race seasons. No boat may be sanded after painting. No inside ballast is allowed. No additional or complicated racing devices are permitted. In one 40-mile race, first and last boat were separated by less than a minute. Round Robin bouts, where skippers change boats after each race, prove nothing — unless it is that one hull wins just as much as another.

Despite airtight rules, the class has not stagnated. Radical changes could be made any time that a unanimous vote of owners favored them. Originally, the boats first came out with working jibs, even though some owners wanted Genoas. It wasn't until overlapping jibs were time-proven that a one hundred per cent vote was given, and they were made legal. Parachute spinnakers also were finally nominated by the

(Continued on page 68)



The construction plan shows a boat of moderate displacement and good lines

UNDER THE LEE OF THE LONGBOAT

By "SPUN YARN"

SO NOW we come to the twentieth anniversary of the revival of the Bermuda race, and if times were peaceful the Old Man would probably be showing you pictures of *Memory*, *Malabar* and, I hope, of the staunch old schooner *Seafarer* in which I made my "landfall" on *Memory's* Marconi rig standing up like a lighthouse several miles ahead of us. Those were the days. We finished a couple of hours after *Memory* (who lost first place to *Malabar* on corrected time) and as we sailed into Murrays Anchorage the next morning I took a picture of Teddy Gosling handing a bottle of liquor to Linton Rigg, swinging out from a boat davit. (Do you remember what a prize a bottle was in those days when the Prohibitionists had us by the throat?) When Dr. Shelley came aboard a few minutes later to give us pratique, Judge Coffin, owner of *Seafarer*, greeted him with, "Hail, blithe spirit of the morning." We were younger and our hearts were very gay.

Well, they'll be gay again. And in the meantime all manner of small craft are finding their way to Bermuda in the first leg of their race against the Axis. Pardon me for being nostalgic. I first saw the incredible green of Bermuda's islands from the deck of a sub-chaser when I was really young, and I'd give nigh on to three decades to recapture that breath-taking moment of blended rapture and foreboding. Maybe you who read this will be partaking of that ecstasy. You'll be dog-tired if it's your first long trip at sea, and doubts of your ability to play the part that war is asking of you will crowd your mind. But on sighting the blissful land you'll say: "The little bucket has gotten us this far and by God she'll get us there and back." In peace or war, Bermuda is tonic to the spirit — and here's to rediscovering it on our own time in the next revival of the ocean racing classic.

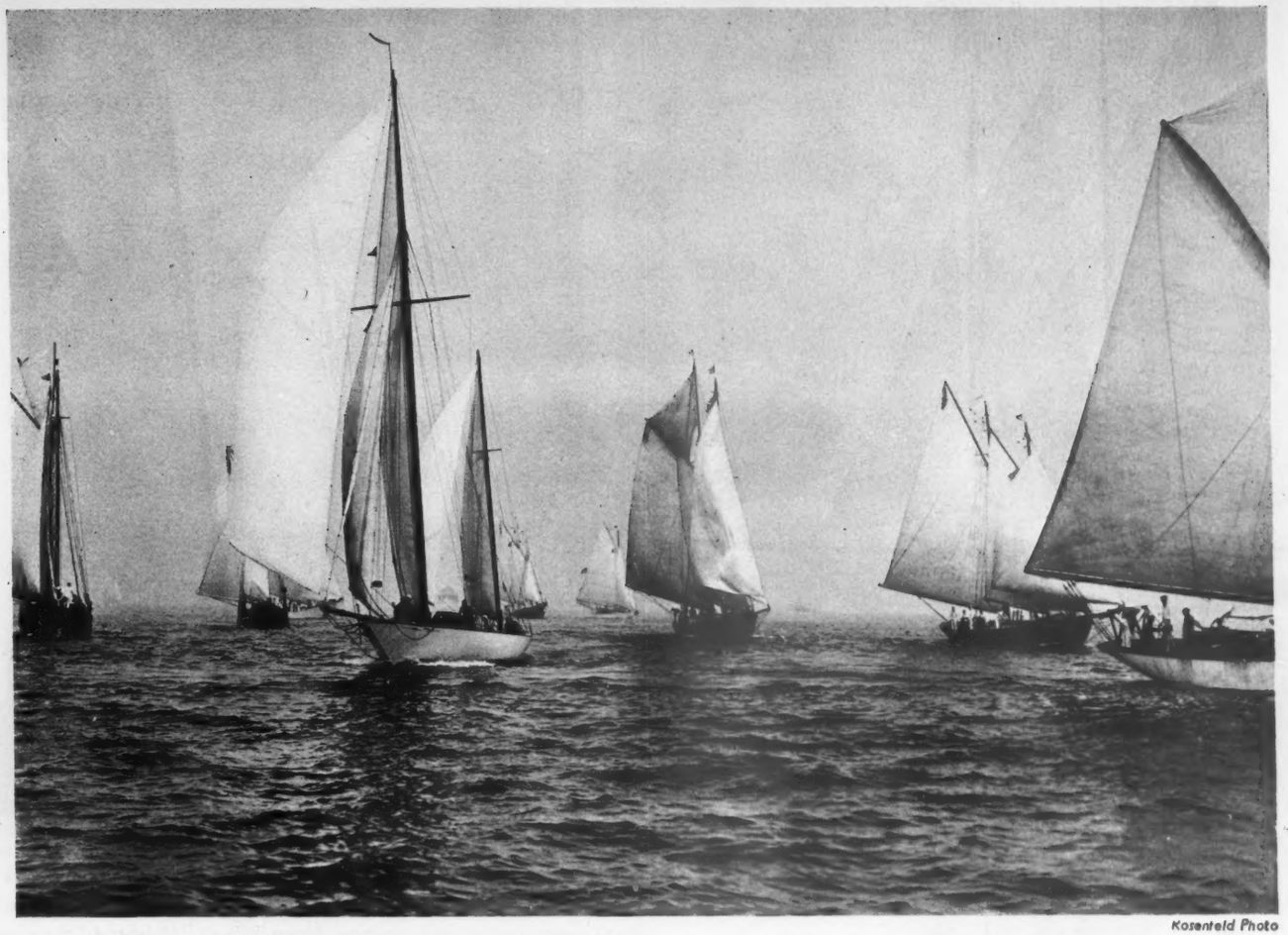
With this poetic gambit, you'll be surprised at the next item on the month's agenda. . . . The Navy in its infinite wisdom and mercy has established rest camps for its sea-weary sailors to which they are ordered, not on sick leave, but on temporary additional duty. And do the boys who have been standing cold and weary watches lap it up! Morning chow at zero eight hundred, dinner in the cool of the evening, movies, bowling, pool, and tennis. It's the life. One of the mine sweeping lads who sampled this earthly Elysium returned sixteen pounds heavier, but with what I thought was a look of dissatisfaction in his eye. There were, it appeared, two flies in the ointment of his content: 1, that he would have preferred being home with his wife and their baby daughter, and, 2, that his wife was mad as hell at him, having written: "You and your cockeyed Navy! Who did they think had this baby anyway?"

My favorite institute of learning at the moment is Fort Schuyler, the Bronx Naval Academy, to which officers are sent for indoctrination whether they need it or not. Some of my j. g. lieutenant friends who have been there have formed my opinion for me. Having served a year in the Naval Reserve without indoctrination, they didn't mind if it pleased Fort Schuyler to go into the higher reaches of erudition and tell them which were the bow and the stern of a naval vessel. What they resented was receiving this confidential information from the lips of an ensign instructor who had himself only just been graduated from the Bronx N.A. and who had never seen the sea. My friends have saluted dozens of ensign instructors, and "sirred" them, and stood when they entered the room — and what they won't do to them if they happen to be shipmates in the fleet where rank is rank is not worth inquiring into further.

Having some good friends in the Coast Guard doesn't keep me from asking what the Navy is doing to win this war. I pick up the newspaper and see that the Coast Guard Cutter *Tuscarora* (fourteen straw decks and glass bottom) has sunk another submarine. Coast Guard personnel is manning tank and infantry landing barges on the shores of Tripoli; Coast Guard sailors virtually won the battle of Guadalcanal. Everywhere I look, including YACHTING, the Coast Guard's exploits fill half the pages. Can it be — this is just a random thought and is probably without significance — that the Coast Guard has a good press agent and that the Navy doesn't need one?

I don't know whether you have met Minga Allen, the heroine of F. van Wyck Mason's new novel "Rivers of Glory." She is the sultry sort, imperious, intelligent, beautiful, and when sailing in a brig to Jamaica most appealing in a perspirational sort of way. But her propensity (or should I say her author's propensity?) for sweating even

(Continued on page 70)



Kosenteld Photo

The start of the Bermuda Race from New London, June 12, 1923, brought to the line a fleet of 23 yachts, mostly of the cruising type then in vogue. They look far different from ocean racing fleets 18 years later. Foreground (l. to r.) "Sunbeam," "Memory," "Bagheera," "Black Hawk," and stern of cutter "Flying Cloud"

TWENTY YEARS OF YACHT DEVELOPMENT

What Ocean Racing Has Done for Yacht Design and Rig Since the Bermuda Race Was Revived

By HERBERT L. STONE

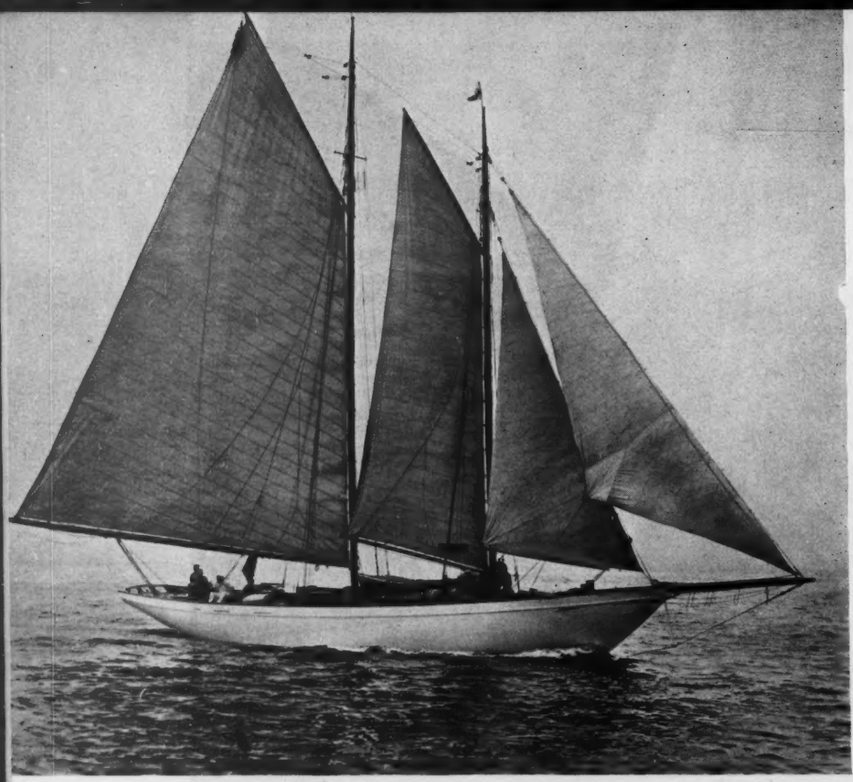
JUST twenty years ago this month of June, the Bermuda Race was revived after a lapse of fourteen years, and ocean racing in a big way was launched on the Atlantic. Earlier attempts to popularize a race over the Bermuda course had been made, but these attracted only small fleets and, after two or three contests, the smaller boats dropped out and only two or three of the larger yachts, manned chiefly by professional crews, could be found to tackle the 700-mile course out across the Gulf Stream to the little group of islands, called familiarly the "Onion Patch." By 1910 or 1911, even these ceased to race. On the Pacific, the race from the Coast to Honolulu had been launched in the first decade of this century but it, too, attracted at first only a handful of yachts, and these were mostly fairly large vessels. Yachtsmen were not yet ready to go in for the sport in a big way.

It was, therefore, with many doubts, and in the face of dire prophecy of failure, that the promoters of the 1923 race undertook to revive a sport that had never been very popular with boat owners, particularly those with small or medium sized yachts, who should be its chief supporters. Yet, when June 12th rolled around, twenty-three yachts showed up at the starting line off New London, equipped, stored, and manned entirely by amateurs, ready for the long grind. It was the biggest fleet that had ever sailed an ocean race anywhere.

It was, as we look back on it, a nondescript fleet that came to the starting line, albeit a seaworthy one, as but few of the contestants were built for racing or to any particular class or type. They were, by and large, mostly cruisers built to no rule and with short rigs as befitted the leisurely desires of their owners. But it was, also, an able fleet, manned and navigated largely by those who had never before sailed a long offshore race, with only two or three among the nearly 200 men aboard who had ever sailed to the Islands. But all were keen for the "big adventure" and, as the starting gun banged from the borrowed committee boat, sending the fleet away, a spontaneous cheer broke from the men aboard them that could be heard 'way back in New London. Ocean racing had "arrived."

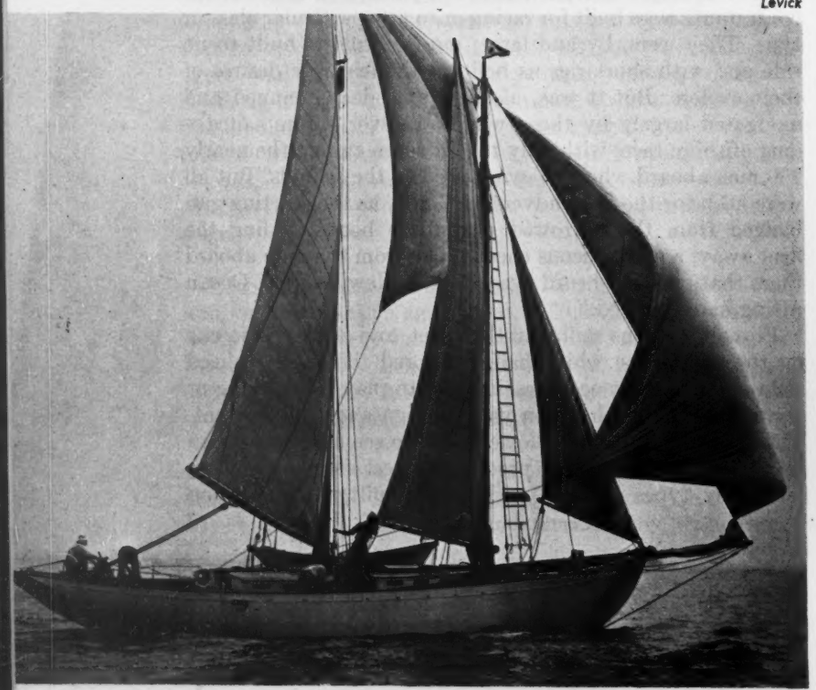
Probably no one sailing in that fleet, and certainly no one on the committee which had sponsored the race, realized then the part that ocean racing was to play in yachting or the effect it would have on yacht design and development. The twenty years that followed were to see an evolution in design and rig that was to produce the best, fastest and most seaworthy types of small yachts ever built, whose coming

(Continued on page 66)



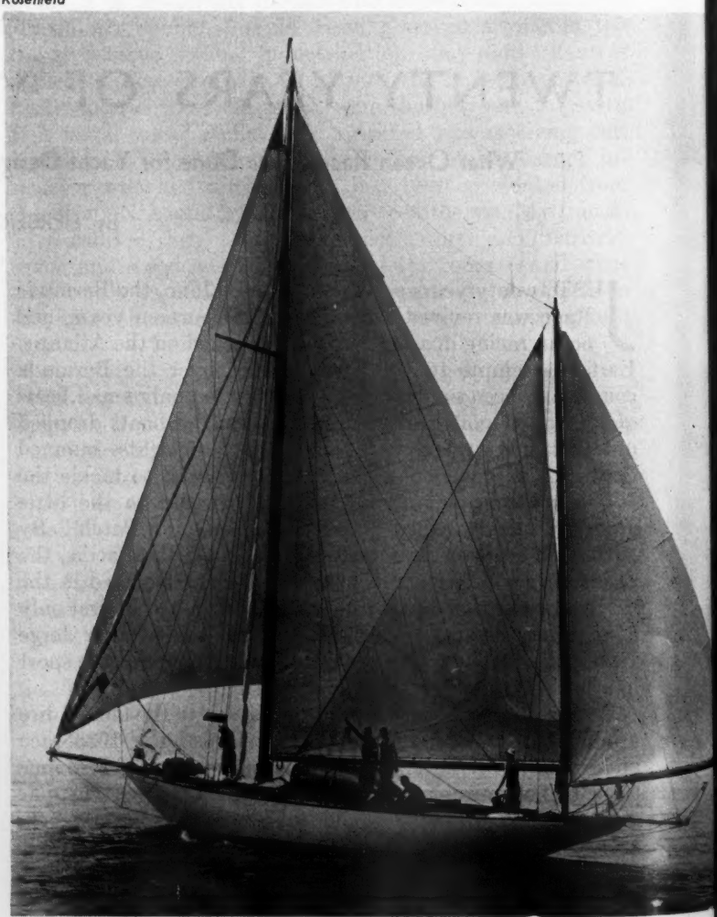
Rosenfeld Photos

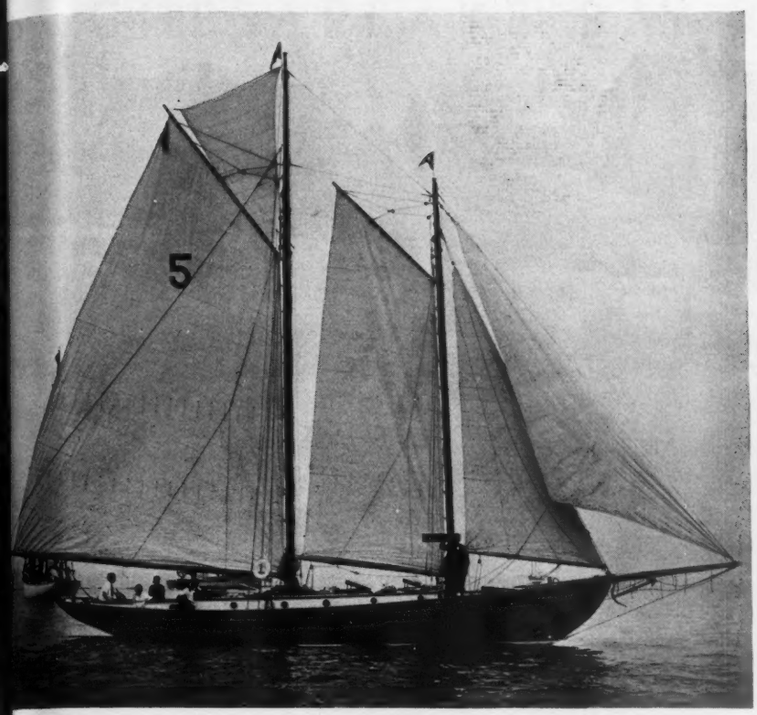
Lovick



Typical of cruisers of the period, they were, with one exception, built to no class or rule. top, schooner "Seafarer," designed by Lawley; center, Herreshoff's idea of a cruiser w cutter "Flying Cloud," fast, but with a big rig; bottom, the Hand-designed schooner "F Cloud" exemplified his fisherman type. Above, Alden's "Malabar 4," the winner, a smar schooner developed from the type whose name she bears. Below, the Herreshoff "40" "Mem with a yawl rig put on by Bob Bavier. (1923 race)

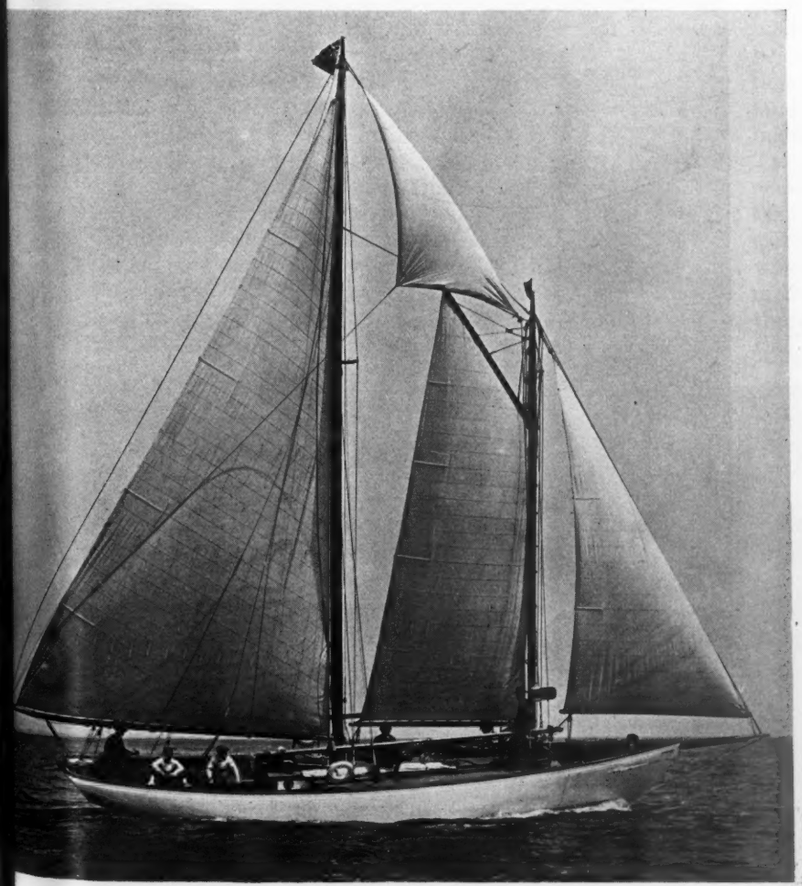
Rosenfeld



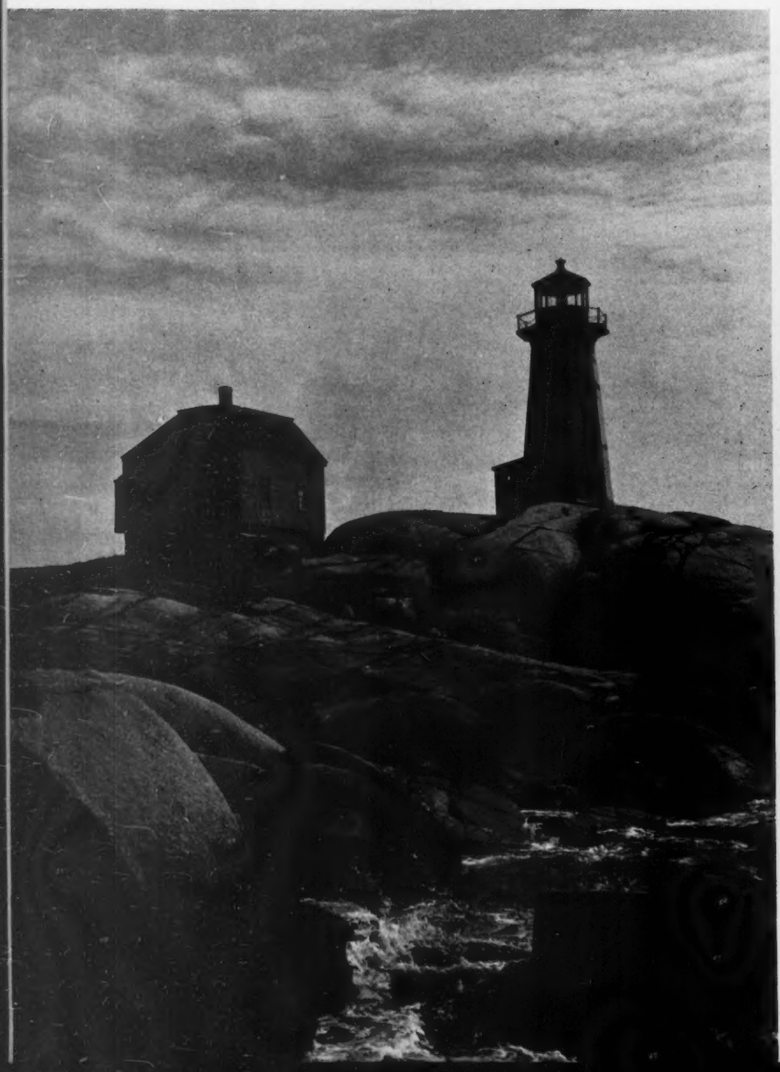


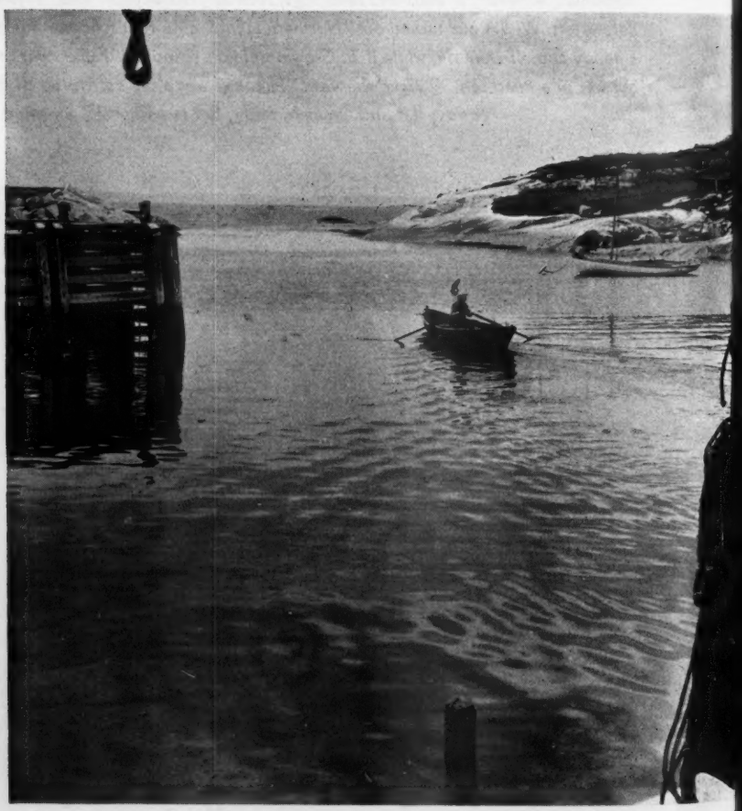
Rosenfield Photos

By the next race (1924), the development had already begun. Alden and Hand had built new schooners, with longer ends and taller rigs, such as "Malabar 5" and "Flying Cloud" (above). Below, left, W. J. Roux turned out "Northern Light," a 45-foot schooner for ocean cruising, with a handy and efficient rig; while B. B. Crowninshield's schooner "Fame" was on the lean side, fast but wet in a head sea. At right, the yawl "Hutoka" was a typical cruiser of the period, shallow body, flat and uncomfortable, but fast when off the wind



PEGGY'S COVE





One of the most picturesque harbors on the Nova Scotian coast is Peggy's Cove, west of Halifax and near the approaches to St. Margaret Bay. Top, the entrance is narrow, between rugged rocks. Above, looking out through the entrance. Left, the lighthouse, as are all the other houses in the fishing community, is erected on bare, wave-smoothed rock

CHESAPEAKE BAY CRABBING SKIFFS

By HOWARD I. CHAPELLE

THE "Eastern Shore" of Maryland and Virginia has long been noted as a prolific breeding ground for distinctive models of sailing craft. Though the bugeye, skipjack and log canoe are undoubtedly the best known of all the Bay craft, the crabbing "skiff" is by far the most numerous and is represented by the greatest variety of model and rig. These small craft, usually under 28′ in length, are to be found in nearly every waterfront settlement and each section of the "Shore" has one or two favorite models, or rigs. The highly individualistic Baymen are often not content with these, however, and import models from other sections or build to their own ideas, so there are usually a variety of models and rigs in use in a single locality, in addition to the one or two popular types.

The comparatively recent origin of the sailing skiff makes it possible to find practically any of the local models still in existence. So far as has yet been discovered, the skiff was not common on the Bay before the early '80's; the log canoe and round-bottom yawl boat seem to have served the purpose. Such skiffs as were used appear to have been flat-bottomed and, with few exceptions, unsuited for sailing. Curiously enough, the use of the centerboard in small craft came quite late on the Bay; canoes were fitted with keels well into the '80's though the centerboard was in use in Bay schooners and sloops as early as 1822. The difficulty in getting suitable timber for log canoes and the cost of round-bottom yawl boats made the "deadrise" or V-bottom model popular, once it was introduced in the '80's. It is not known whether the skiff preceded the skipjack but it is apparent that the relationship was close.

As a prelude to a discussion of the crabbing skiff, it must be emphasized that there was no orderly progression in development which could be traced from model to model. Flat-bottom, V-bottom, or a combination of both, and one- or two-masted rigs, were all in use and appear to have sprung into existence about the same time. There was a perfectly logical reason for this: the Bay builder began building skiffs after a long experience with other models and so began with definite ideas as to what was proper. This was equally true of the skiff's owner. Undoubtedly, local conditions and traditions played some part in the choice of a local model though usually the most successful model turned out by a local man was soon accepted as the local type. By this means, the great variety of models and rigs can be accounted for as can, also, the variation in methods of construction.

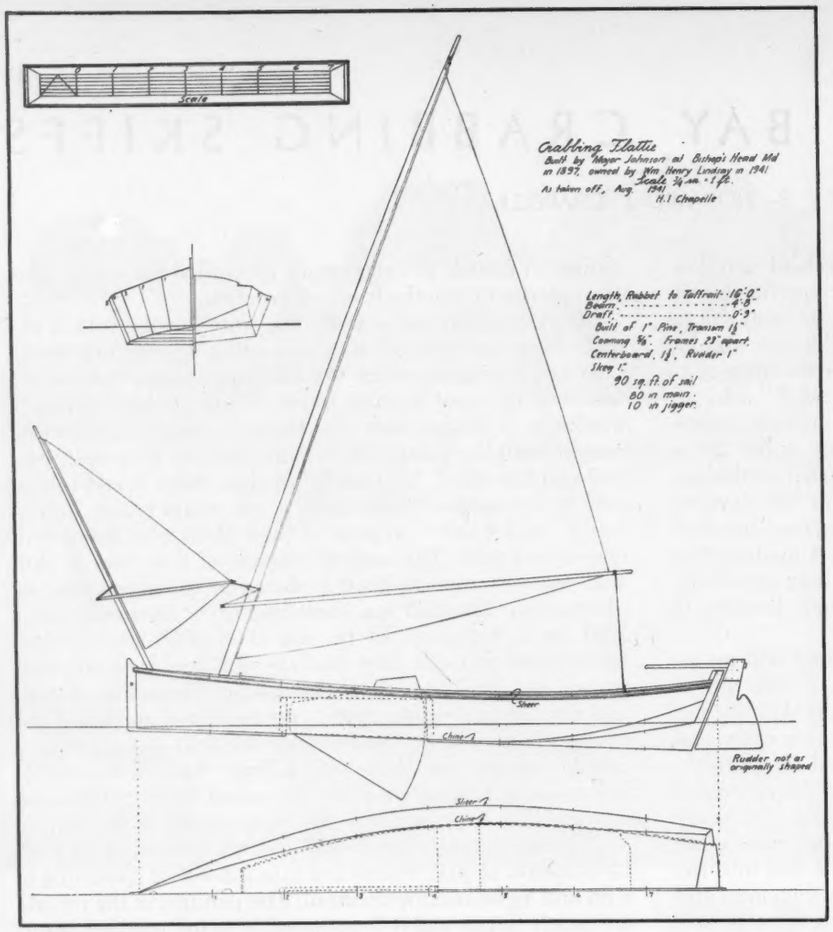
Many crabbers work along the water's edge with a dip net, either towing the boat and wading, or standing in the boat and rowing or poling. For this purpose, the flat-bottom boat was the most suitable model. From the little evidence available, it seems that the Baymen, being used to log canoes, built these flat-bottom skiffs sharp at both ends, narrow and low-sided. No man in his right mind would row or pole in the summer time, when a sail would enable him to travel "at his ease," so most of these skiffs were fitted with one or two sails. The earliest example of this class of skiff that has yet come to hand is shown in the accompanying photograph. This skiff was photographed at Annapolis about 1891 by investigators of the old U. S. Fish Commission. Close inspection will show that the skiff was flat-bottomed, framed and planked in the usual manner. Though mast steps and thwarts are visible, there were neither centerboard nor rudder. It may be concluded that the boat steered with a paddle and she may have had a long, shallow, removable keel made of a plank on edge, to prevent leeway. This boat was probably built for use in the upper reaches of the Severn.

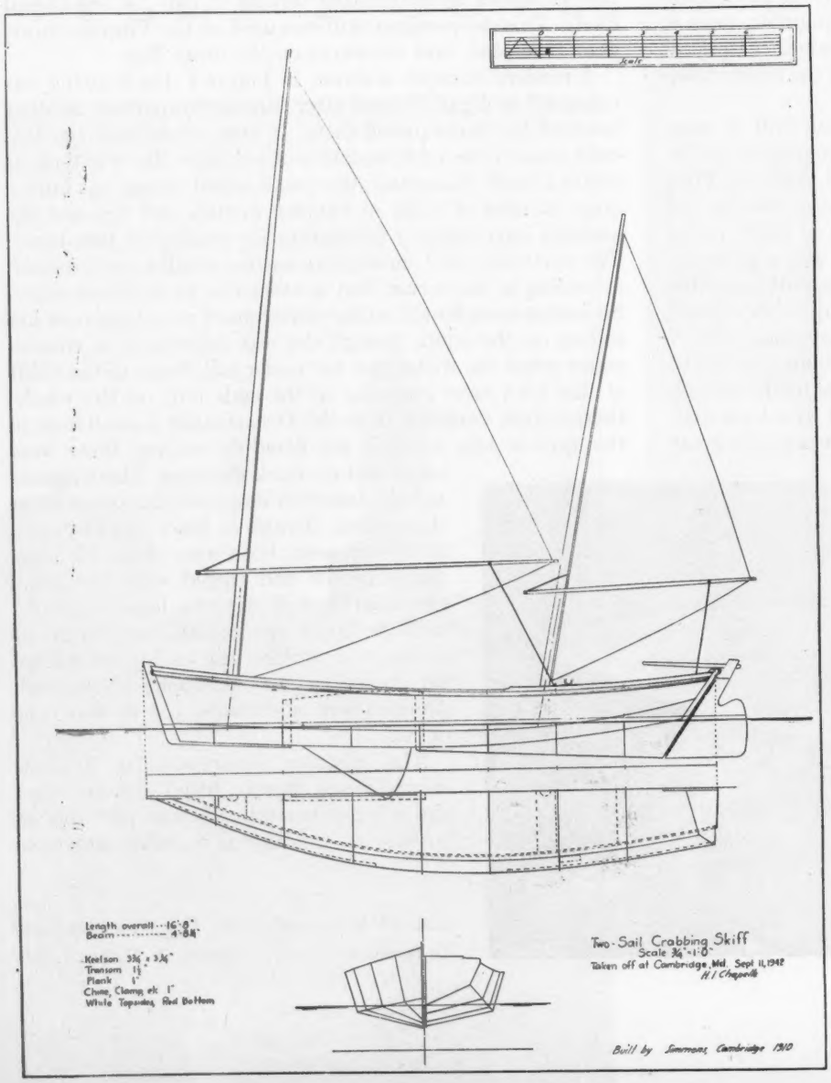
The same general type of skiff is shown in some of the Fish Commission annual reports but with a sloop rig consisting of a jib and leg-of-mutton mainsail. The pictures in the reports are poorly drawn and it is not possible to tell whether or not this type had a centerboard though it may be considered likely. This sloop-rigged skiff was used on the Virginia shore, near Hampton, and elsewhere on the lower Bay.

A modern example is shown in Figure 1; the drawing was taken off at Deal's Island after careful comparison of other boats of the same model there. In size, model and rig, this boat seems to be representative of her class. She was built at Smith Island, Maryland; this small island village has built a large number of skiffs of varying models and rigs and the builders have quite a reputation for producing fast boats. The particular skiff shown here has too small a centerboard, according to her owner, but is otherwise an excellent sailer. Six inches more length to her centerboard would improve her sailing on the wind, though she was impressive in smooth water when the writer saw her under sail. Some of the skiffs of this type have less rake to the ends but, on the whole, there is little variation in model. Occasionally a small boat of this type is seen which is not fitted for sailing; these were once used for duck shooting. There appear to have been few large two-masted skiffs of this model, though at least two examples have been seen; both were about 22′ long, quite narrow and rigged with the usual two-masted skiff rig: two leg-of-muttons, with the larger one forward, and no jib. It seems evident that the early two-masted rig shown in the Annapolis photograph dropped out of common use in this type of skiff.

The common square-sterned, flat-bottomed sailing sharpie, fitted with one mast and a leg-of-mutton sail, was probably as popular on the Bay as on other American

Crab skiff at Annapolis, 1891. From the picture file of the Bureau of Fisheries. Courtesy Dr. Vernon L. Tate


Crabbing Flattie
Built by Major Johnson at Bishop's Head Md
in 1897, owned by Wm Henry Lindsay in 1941
Scale ¾ in. = 1 ft.
As taken off, Aug. 1941
H.I Chapelle
Length, Rabbet to Taffrail 16'0"
Beam 4'8"
Draft, 0'3"
Built of 1" Pine, Transom 1⅛"
Coaming ⅝". Frames 23" apart.
Centerboard, 1¼", Rudder 1"
Skeg 1".
90 sq. ft. of sail
80 in main.
10 in jigger.
Sheer
Chine
Rudder not as originally shaped



waters. A few can still be seen though only the older boats can be said to have much style; these had curved stems, somewhat like the ends of the Annapolis skiff in the photograph, and a graceful sheer. The Chesapeake, or "Hampton Flattie," seems to have been a development of this model. The Flattie has been described in earlier YACHTING articles on the sharpies and the Chesapeake Bay Skipjacks.* Though the existence of Flattie skiffs was known, it was not until the summer of 1941 that the writer found one in sufficiently good condition to be measured. This skiff was found on the marshes near Bishop's Head, a village on the north side of the mouth of the Nanticoke. She was in good condition except that a marsh fire had damaged her centerboard case and rudder. The owner had her sails and spars and so it was possible to get complete information on this particular boat. She was built by Major Johnson (Major was his name, not rank) at Bishop's Head about 1897 and has been in her owner's possession since built. Johnson was a well-known skiff builder who turned out other models besides the flattie. Like all modern flat-bottom Bay craft, this Flattie has her bottom cross-planked, though aft she is herringbone planked like a skipjack. She was built for crabbing but was used occasionally for oyster tonging and according to her owner, had greater capacity for her length than many of her model.

Like most of her model, the Flattie skiff in Figure 2 was a good sailer in strong winds, considering her small size, but was rather wet. In light airs, she was reported to be rather sluggish compared to the later deadrise skiffs. The model requires little comment; the run is made short to permit weight to be carried aft out of the way of the sail and centerboard gear. To enable weight to be carried without causing drag, the run is carried high at the stern, a characteristic of all Bay-built working skiffs designed for sailing; but the builder kept the run as straight as possible at the extreme stern. The construction was somewhat different from modern skiffs; the keelson did not run to the stem but began at the fore end of the centerboard trunk and was carried to the transom. The keelson was hewn out of a natural crook of loblolly pine and finished about 3" by 6". It is not possible to say for certain but the keelson may have been rabbeted for the bottom planking where the deadrise exists; if this is the case, the keelson must be about 4" by 6" abaft Station 5.

The most interesting feature is the method of going from the square across

* *May and June, 1932.*

Fig. 2. The individualistic Baymen are not always content with conventional rigs. Witness the "stick-up" headsail above. — Fig. 4. A "two-sail bateau".

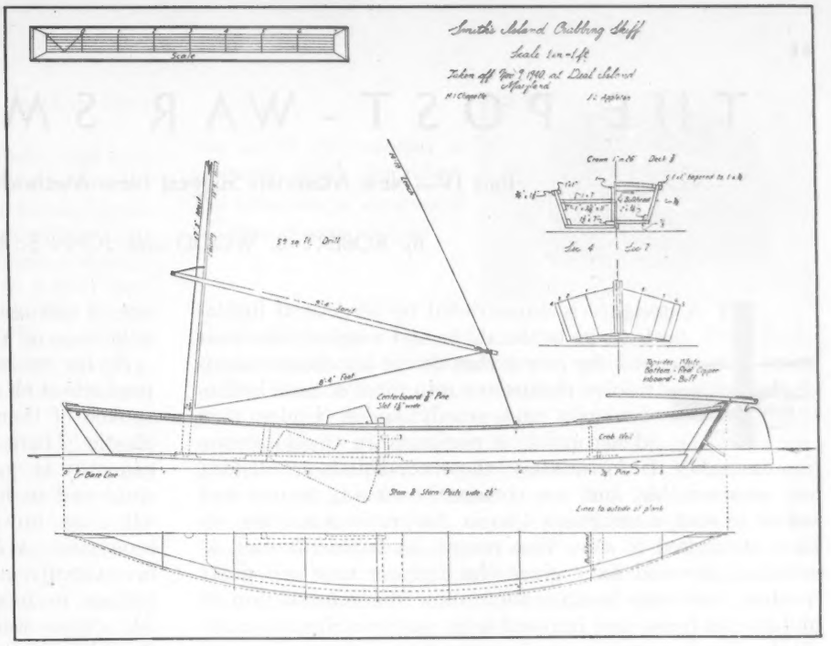
planking of the forebody to the herringbone planking of the afterbody. Instead of using tapered cross planking to accomplish this, at about Station 5, the builder used a wide cross-plank, the fore edge of which was straight but the after edge was a deep V with the apex of the V on the boat's center line, pointing forward. The amount of V is great enough to permit the herringbone planking to be made with parallel edges all the way aft to the transom; the angle with the center line of the boat was about 12°.

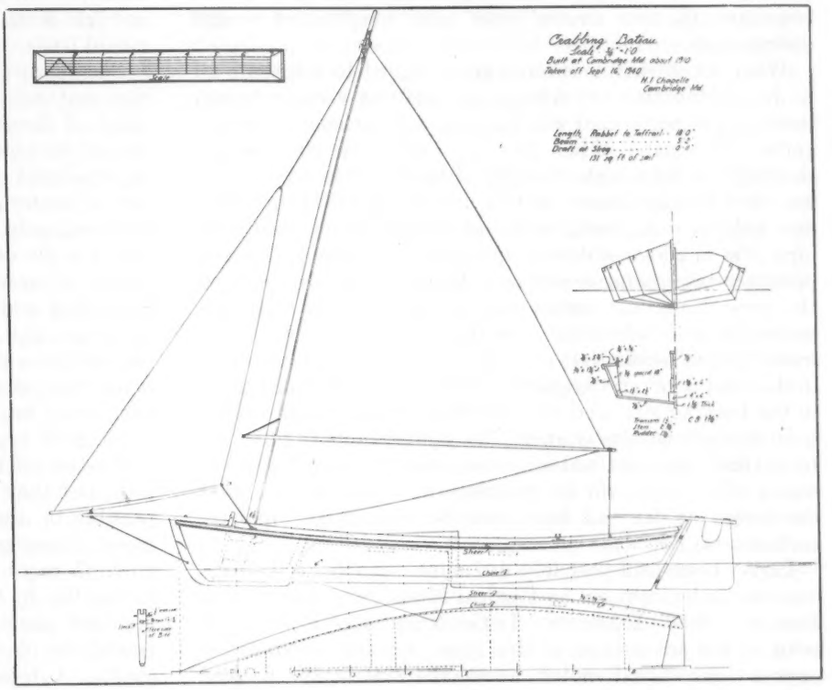
The boat was well put together and finished; the owner thought she could be improved by lengthening the deck forward and raking the stem slightly. The rig was a common one on canoes in the portion of the "Shore" between the Nanticoke and the Pocomoke rivers but the canoes usually had two masts as well as the "stick-up," or "jigger," headsail. It is impossible to find out with certainty where or how this peculiar sail originated on the Bay. It had the advantages of being easily unshipped and stowed away. The sail was effective on the wind for the luff remained straight, unlike a jib on an unstayed mast which often sags to leeward a great deal. However, the sheet lead was not entirely satisfactory, though some cut the foot of the jigger without as much rise as shown and carried the sheet to fairleads on deck, like a jib. Another method was to fit light shrouds to the mainmast and sheet the jigger to the shrouds. Sheeting to the mast was the standard method.

Baymen also speak of a "stick-out jib," which is not the "stick-up" shown in the Flattie skiff. The "stick-out" is the "balance jib" used by the canoes and some skiffs on the Bay; this was introduced in the late '80's, it is said. This sail was also used on Long Island Sound in the '90's and earlier.

Skiffs are also called "bateaux" on the Bay. In the northern portion of the Bay, in fact, a "bateau" is a small skipjack with a half-deck; but in general the name "bateau" is applied to all V-bottom boats, sail or power, by Baymen and "skipjack" is rarely heard. Around Cambridge, the latter name for the V-bottom was apparently used in the '90's — at least it is found in old account books and sailmaker's drawings — but further south these same sources use the name "bateau" instead. A "one-sail bateau" is any V-bottom boat having one mast and a single sail; a "two-sail bateau" is a sloop-rigged, or skipjack rigged, hull, or a two-masted rig like a

(Continued on page 76)





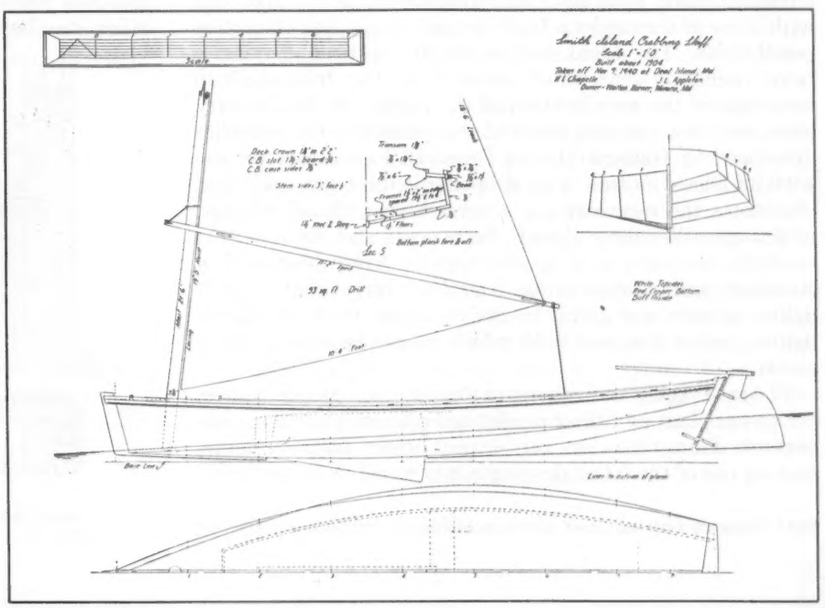


Fig. 1. A Smith's Island Crabbing Skiff.— Fig. 3. Sloop or Skipjack-rigged Bateau.— Fig. 5. A recent development of the Smith's Island Skiff. The tumble home is supposed to make this model more close winded when sailing in extremely shoal water

THE POST-WAR SMALL BOAT

Part IV—New Materials Suggest New Methods of Construction

By ROBERT J. WOOD and JOHN S. BARNES

IF A designer is unrestricted by structural limitations as to the shape and weight of his boat and the power that drives her, his problems resolve themselves into those of pure hydrodynamics and aerodynamics. Under such ideal conditions, performance would increase immeasurably. Unfortunately, those conditions are distant and unattainable, but are constantly coming nearer and nearer to such a designer's Utopia. In previous articles, we have attempted to show that recent developments such as moulded plywood have given the designer new and great freedom, not only because they allow the construction of hull shapes heretofore impossible or economically impractical, but because they also allow greater weight saving and, consequently, new control over total weight and weight distribution.

When small marine motors are designed to use the high powered fuels that are driving our fighting aircraft today, horse power per pound will increase and cruising range per gallon will expand. When that day comes, we will also find that light weight, high strength, alloyed metals, from stainless steel to magnesium, will be competing for the markets now held by iron, steel, brass and bronze castings and forgings. These alloys will have qualities yet unpublished and perfected fabricating techniques. We will soon look back on the present marine engine with nostalgia, if not with the contempt with which we now remember those two cycle, nickel plated devils that once stubbornly sulked and stank in the bottom of our "launches" while we sweated and swore in the broiling sun, and the otherwise lovely Sunday afternoon slipped profitlessly away. The power plants to come will be so small, compact and otherwise desirable that the sailorman's conversion will be complete and only the smallest one-design or day sail boat need be without an auxiliary tucked away aft.

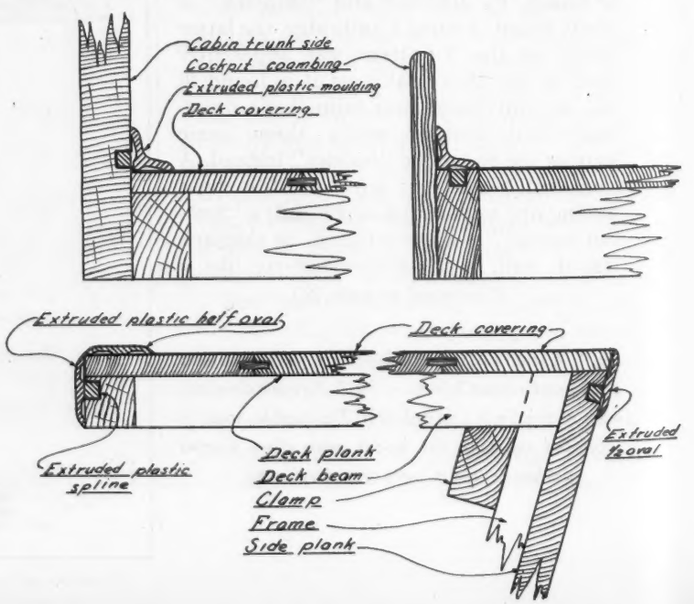
Larger boats will probably use many versions of the pancake motor brought out by General Motors and described in January, 1943, YACHTING. Little boats may also utilize some of the advantages of this type. A small, horizontally opposed, air cooled motor, about the size of the present outboard power head and combining the virtues of that type with those of the modern, light aircraft motor, has attractive possibilities. The crankshaft could be vertical, driving a bevel reduction gear which would allow the drive shaft to come out of the very bottom of the motor. In the January issue, mention was also made of the variable pitch propeller developed by General Motors Research Laboratory for use with its Diesel motors. This propeller is fully reversible and eliminates the necessity for a reverse gear. Small editions of this propeller have already been made and are now successfully operating in a special type of Army boat with a standard small marine motor. And don't forget that smaller, lighter motors are going to deliver more push to bigger, lighter, better designed hulls which do not require as much power.

The sails, spars and rigging of the sail boat are, of course, her power plant and their weight and efficiency are most important. Here, too, we can expect great improvements, making use of the latest developments in sail cloth and cordage. A discussion of these will be found in an article in the July issue of YACHTING.

So far we have mentioned many of the synthetic resin products such as adhesives and fibers, but we have not yet spoken of them in their most familiar form: the moulded plastic. There are no outstanding moulded products used generally in yacht construction today except as they are employed in manufactured articles such as motors. They will come, however, and soon. It is now largely a matter of economics. A few years ago, Skaneateles Boats made an investigation of the cost of producing some of the special fittings in moulded plastics. The findings showed that, while there were several applications where the plastics of that day would be satisfactory, the quantity required by any one manufacturer was not great enough to justify the mould costs.

Plastics are divided into two main groups: the thermosetting materials and the thermoplastics. The first is constituted of those materials that are hardened by heat. The phenol formaldehyde resin glue used to make waterproof plywood and described in Part I is in this group. Once this type of material has been hardened by heat, it can never be softened again either by heat or by solvents, short of destruction. On the other hand, the thermoplastics become soft or plastic when heated and harden when cooled. This cycle of hardening and softening can be repeated many times, and there are also a few special solvents that will soften and cement these materials. Both may be formed into shapes by being compressed into heated moulds. There are many varieties of both types and each has its individual characteristics. Both types will find uses in yacht work.

Plastics are not as strong as metals in pounds per square inch, but they are much lighter per cubic inch so that it is possible to use much larger sections than may be used in metal. Many small boat fittings have been larger than their strength required because a smaller size would be too small to handle. In these cases, weight could be saved by using moulded plastics. In other cases, it would be possible to mould the plastic around a core of heavy metal wire reinforcing. Automobile and truck steering wheels are made in this way. Light and medium cleats, cheek blocks, and many other standardized fittings of similar nature will be made



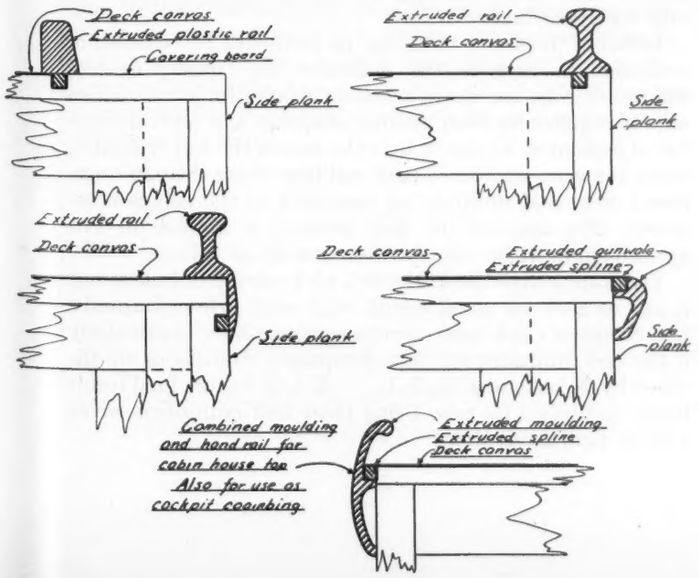
Right. Some possible extruded plastic mouldings for post-war construction

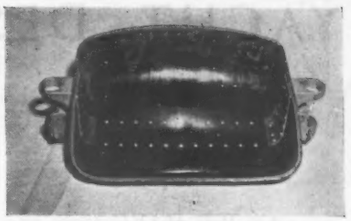
thus. They will be lighter and less expensive than their metal counterparts.

Thermosetting plastics, laminated with fabrics and sold under such trade names as Micarta, have long been used for sheaves in aircraft and for halliards in small racing boats. They are sufficiently strong to use in big blocks and so light that they could be used in larger diameters. Such a sheave, enclosed in a cheek of plastic, reinforced with a thin steel strap to form the bearing of the pin and to take the becket and eye, would save so much weight over a bronze block that it could be much larger than the latter, greatly prolonging the life of the line running over it. It would be cheaper and lighter than the present wooden block.

Plastics of various natures have long been available in stock sheets, bars, tubes and rods for fabrication into finished parts. They can be shaped with woodworking tools and buffed to a polish. Laminated tubes should make good light spreaders; sheets should make shoulder cleats; and bars and rods can be formed into other small compression members where the splitting tendency of wood requires large sections or where a casting is too heavy or too expensive. The most spectacular application of sheet plastic was already making itself known in the marine field when the aircraft program swept it to great prominence. We refer to the transparent sheets, such as Plexiglass, that enclose the bombardiers, gunners and pilots of our fighting planes in beautifully streamlined "greenhouses." These are thermoplastic materials and can be formed to curved shapes by heating them until soft. The process is not too difficult nor the moulds too expensive for the boatbuilder. What limitless possibilities this opens, at least to the imagination! The material, while lighter than glass, is heavier than wood, so it probably will not be used for cabin trunks. But why shouldn't it be used to form the greater part of a doghouse? The structure could be designed so that light gauge sheets could be used. These, combined with the elimination of the large amount of glass usual in doghouses and any paint-filled canvas covering on the roof, would permit a total weight probably not in excess of the present type. What a delight it would be! It might partially overcome the greatest objection to a doghouse — its obstruction of the helmsman's vision. It would increase the illumination of the whole cabin, particularly in foul weather when all openings but the companion into the doghouse would be closed.

In any event, the material can be used for large curved windshields or cowls and to form a large portion of a skylight or hatch. It is not brittle, like glass, but quite resilient and therefore the frame need not be so heavy as to relieve the transparent material of all stress. Instead, the material itself can be made to carry some of the stresses. Its biggest weakness at present is that it is soft and will scratch fairly





This aircraft seat, moulded of laminated fabric, with aluminum fittings may be a preview of things to come for boats

easily so that in time its clearness is impaired. This is the subject of much investigation and good progress is being made. This objection may not exist by the time it is available for civilian use. Transparent plastics may be moulded and there is a new transparent thermosetting material available that looks promising for moulding such things as port lights, with the transparent center and the frame in one integral part. Why not dome-shaped, transparent plastic binnacles? The compass card would also be transparent and the points shown in figures of fluorescent material as are the dials of some aircraft instruments. These appear as the usual printed figures in daylight and are normally invisible in darkness until a small light, emitting infra red or invisible light rays, is turned on. When struck by these rays, the fluorescent figures glow sharp and clear and are quite legible for some distance, but the light has none of the blinding effect of white light. The source of infra red light would be under the transparent card and operated by a switch within reach of the helmsman.

Aviators have a handy little chart envelope made of transparent plastic into which you tuck a folded chart. It not only protects the chart from flying spray but, when brought near the infra red light source in the binnacle or a special pocket-type infra red flashlight, the envelope glows gently, illuminating the surface of the chart.

The field for plastic appears almost unlimited and a delightful pastime is thinking up new and wonderful things to make. Moulded tableware is light and attractive as well as practically indestructible.

One of the most interesting possibilities lies in extruded plastic mouldings, made from thermoplastic material forced through a die of the desired shape while the material is hot and soft. Long strips are made in this way and are now available in a wide variety of sections for such purposes as stair nosings, mouldings around the edges of linoleum, counter edges, and a multitude of other domestic purposes. They are often used where two differently colored surfaces meet, and they save the tedious job of cutting by hand or masking the long straight lines where the colors meet. These extrusions will serve the same purposes in boatbuilding that they serve in home building, but one of the most promising uses is in small rails, rail caps, coamings, gunwales, and cabin house mouldings.

Extruded mouldings of this nature can be smaller and thinner than similar wooden ones because they will not split and the fastening holes can be placed near the edge. In many instances, they will have hollow or coved backs so their weight will compare favorably with the wooden ones they replace, and their edges will be drawn into a tight joint with contacting surfaces.

The sketch shows a system of deck canvasing based on extruded mouldings that should be attractive and economical, as well as permit replacing deck canvas in a simple manner. Tightening and holding canvas by a spline driven into a groove has proven satisfactory over a long period. One simple system employing only a half oval, an ogee and a spline, is shown. This would be suitable for small boats

(Continued on page 80)

Left. Extruded plastics will make possible some neat rails on future boats

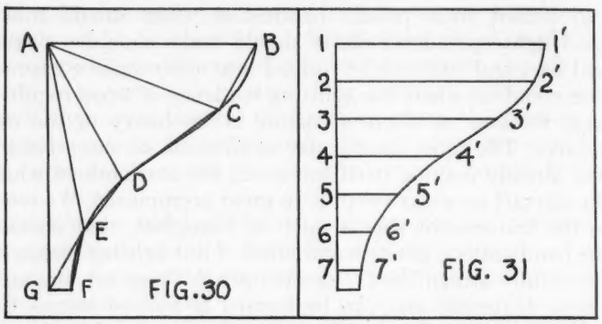
YACHT DESIGNING FOR THE AMATEUR

Part III — Some Methods of Calculation

By CHARLES H. HALL

AS WE HAVE seen, any body floating in a liquid displaces a volume of that liquid equal to the weight of the body. This displacement is usually expressed in measures of weight, either tons of 2240 cubic feet or in pounds, though it may be expressed in cubic feet. A cubic foot of salt water weighs 64 pounds and one of fresh water 62.4 pounds. This works out to 35 cubic feet to a ton of salt water or 36 feet of fresh. A rectangular box 10 feet long, 3.5 feet wide and 2 feet draft would have a submerged volume of 70 cubic feet and would displace two tons or 4480 pounds of salt water. Finding the displacement of a simple form such as this is easy; calculating the displacement of a boat, a form bounded by curved lines, changing shape everywhere, is not so easily done. Let me warn you that this will be dry reading but it is a subject which the designer must master.

First, we must have the drawing of the lines of the boat. From it, we calculate the submerged volume by summing up the areas of each transverse section, drawn at regular intervals, obtaining the area of each section by some means and then combining these areas. We can draw each section on squared paper, counting the number of squares and fractional squares below the water line in each section — a tiresome process. We can divide each section into triangles as shown in Fig. 30, calculating the area of each triangle and adding these areas together to get the total area of the



Methods of finding the area of a section, without a planimeter

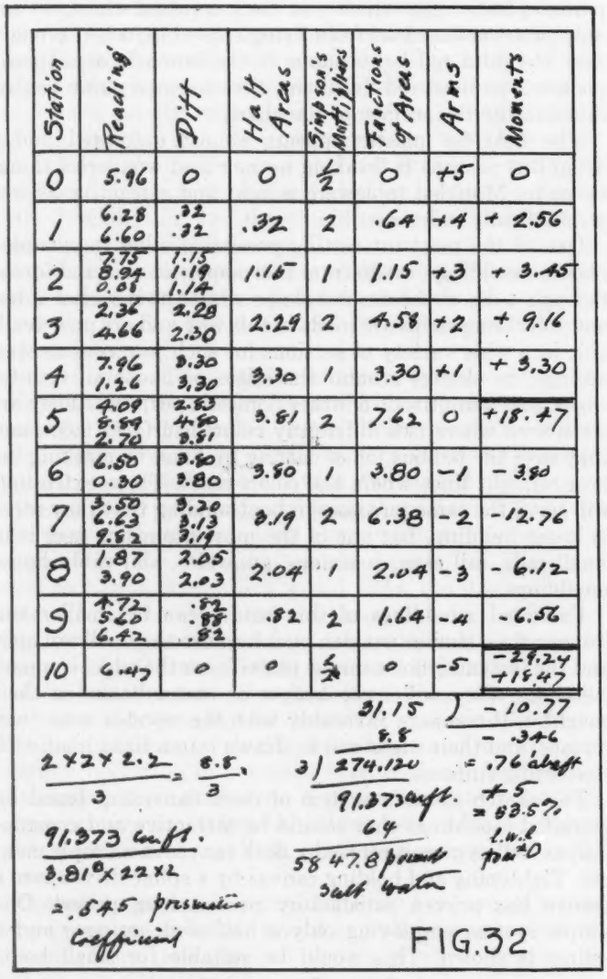
section. This, too, is a tedious job. Or we can measure the half breadths of the various water lines, as in Fig. 31, and sum them by one of the rules to be given. Best of all methods, the quickest and most accurate, is to measure the area of each section with a planimeter.

There are three rules in common use for determining the area of an irregular figure bounded by a straight line and a curve: the trapezoidal, Simpson's and Durand's. Consider Fig. 31. Measure the lengths of 1–1′, 2–2′, 3–3′ and so on and set them down in a column. These lengths are called ordinates. For the trapezoidal rule, add one half of the end ordinates (1–1′ and 7–7′) and all of the intermediate ordinates and multiply the sum by the "common interval" (the distance the ordinates are apart), and the product will be the area of the figure 1–1′–2′–3′ . . 7′–7– . . . 3–2–1. The small area below 7–7′, known as an "appendage," must be calculated separately and its area added to the whole.

Durand's rule is a little more complicated. To use it, add four-tenths of each end ordinate (1–1′ and 7–7′), eleven-tenths of the adjoining ones (2–2′ and 6–6′), and all of the intermediate ones. Multiply by the common interval and add the appendage as before.

Either of the above rules may be used with any number of ordinates as long as the ordinates are equally spaced. Simpson's rule, the naval architect's favorite, is still different. It requires an even number of spaces and an odd number of ordinates. To use it, take the sum of the end ordinates, twice the even numbered ones and four times the odd numbered ones, and multiply by one-third of the common interval. This assumes the first ordinate is number 0. The appendage must be calculated separately as before.

The trapezoidal rule works well with enough ordinates but is apt to give too small results with only a few. Durand's and Simpson's are more accurate. Sometimes, particularly if the end ordinates are zero, Simpson's multipliers are divided by 2, becoming ½, 2, 1, . . 2, 1, 2, ½, the final result being multiplied by two. Using these half multipliers saves a bit of figuring at times.



Station	Reading	Diff	Half Areas	Simpson's Multipliers	Fractions of Areas	Arms	Moments
0	5.96	0	0	½	0	+5	0
1	6.28 6.60	.32 .32	.32	2	.64	+4	+ 2.56
2	7.75 8.94 0.08	1.15 1.19 1.14	1.16	1	1.15	+3	+ 3.45
3	2.36 4.66	2.28 2.30	2.29	2	4.58	+2	+ 9.16
4	7.96 1.26	3.30 3.30	3.30	1	3.30	+1	+ 3.30
5	4.09 8.59 2.70	2.83 4.50 3.51	3.51	2	7.62	0	+18.47
6	6.50 0.30	3.80 3.80	3.80	1	3.80	−1	− 3.80
7	3.50 6.63 9.82	3.20 3.13 3.19	3.19	2	6.38	−2	−12.76
8	1.87 3.90	2.05 2.03	2.04	1	2.04	−3	− 6.12
9	4.72 5.60 6.42	.52 .88 .82	.82	2	1.64	−4	− 6.56
10	6.47	0	0	½	0	−5	−29.24 +18.47

31.15) −10.77
5.8 − .346
3) 274.120 = .76 draft
91.373 cu ft. + 5
64 = 83.57
5847.8 pounds L.W.L
salt water from 20

2 × 2 × 2.2 / 3 = 8.8 / 3

91.373 cu ft.
3.81' × 22 × 2
.545 prismatic
Coefficient

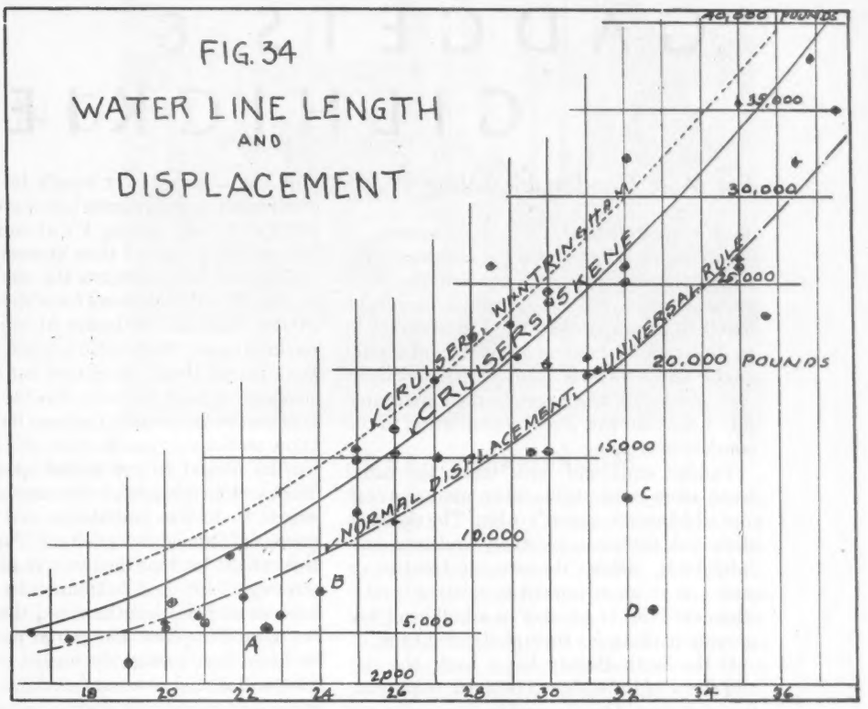
FIG.32

Fig. 32. A page from the work book, showing the calculation for displacement and fore-and-aft location of the CB

But the planimeter gives more accurate results with less trouble and in considerably less time. The instrument may read either in square inches, or, by setting it to certain marks, in square feet according to the scale of the drawing. If it reads only in square inches, a "scale factor" must be applied to get the area in square feet. This factor is the square of the reciprocal of the scale of the drawing. For instance, if the drawing is to the scale of ½" to 1', an actual square inch on the drawing will measure, to scale, *two* inches on each side or *four* square inches area. So that each planimeter reading must be multiplied by 2 x 2 or 4. If the drawing is on the scale of ⅜" to 1', the scale factor will be ⅜ x ⅜ or 6⅘. Of course, to save work, the scale factor is applied to the final sum instead of to the area of each section.

With the body plan sketched in, set the planimeter on the paper so that its pointer may sweep over the whole of the underbody without opening up to such an unfavorable angle that it tends to capsize. Lay out eight columns in the work book and head them — abbreviations are in order — Station, Reading, Differences, Half Area, Simpson's Multipliers, Functions of Areas, Arm, Moment. In the column headed Station, set down the number of each station: 0, 1, 2 and so on. Under Reading, put down the reading of the planimeter wheel on each station, each time you go around it, and under Difference put the difference of the successive readings. The average of these differences goes in the column headed Half Area. (These are not really half areas unless the scale of the drawing and the planimeter setting give results in square feet but this is a convenient heading.) Under Simpson's Multipliers, write 1, 4, 2, 4 . . . 2, 4, 1 (or ½, 2, 1 . . 1, 2, ½, remembering to multiply by 2 at the end). The product of each Half Area and its Simpson's Multiplier goes in the column headed Function of Areas.

Now set the pointer of the planimeter on the body plan at the intersection of the center line and the water line and read the wheel. Set this figure down in the work book under Reading and opposite Station 0. Then follow the water line out to the right until you reach Station 1 and follow down Station 1 to the center line, thence up to the starting point on the water line. Read the wheel and set down the reading. As a check, go over the same route again and set down the new reading. Subtract the original Station 0 reading from that on Station 1, and the first on Station 1 from the second. They should check within a digit or two. If they don't, go over the station again until they do, then go on to the next station and repeat the process. When you come to the afterbody, go down the center line first since the planimeter subtracts if it is run counterclockwise. In working a planimeter, take it easy and do not hurry. Stick as close to the line as you can and, if you make an error, do *not* try to balance it by making an equal error in the opposite direction.



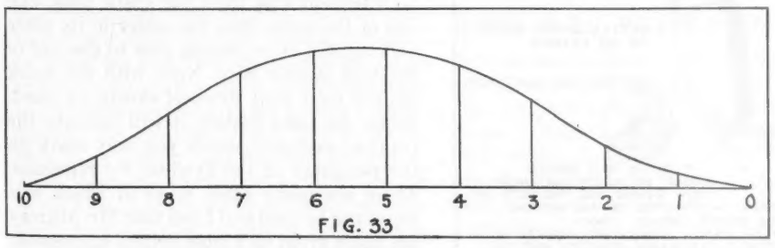
Graph giving the relation of displacement and water line length for different types of boats

In the example given in Fig 32, the two readings on Station 1 check well but there is a discrepancy on Station 2, so that we go over the station again, this time getting a more consistent result. The first reading on Station 5 is evidently a misreading; it should have been 5.09 instead of 4.09. Discrepancies also showed up on Stations 7 and 9 but running around them again seems to have straightened the error out. Errors show up at once and may be corrected at once.

Now multiply each Half Area by its Simpson's Multiplier and set down the product in the column Functions of Areas. Add the figures in this column and multiply the sum by 2 (for both sides of the boat), by 2 if we have used half multipliers (which we did), by the common interval (2.2) and by the scale factor (in this case 1) and divide by 3. The result is the volume of the boat's underbody in cubic feet. This must be multiplied by 64, the weight of a cubic foot of salt water, for a small boat or divided by 35, the number of cubic feet of salt water in a ton, for a big one.

In Fig. 32, the drawing was on the scale of 1" to 1', so that the scale factor is unity, the common interval is 2.2'. Rather than work out a fraction for one-third the common interval, the whole interval is used and the product divided by 3. The displacement is 91.37 cubic feet or 5848 pounds. This total displacement may or may not be enough to float the boat at her designed water line with crew and all her equipment aboard, nor does it give any idea as to the position of the CB (center of buoyancy).

To get the position of the CB, multiply each Function of Area by the number of spaces it is forward of or abaft the midship section, Station 5. These are found in the column Arms and are marked plus or minus according to whether they are forward of or abaft Station 5. The products, with the appropriate signs, are set down in the Moment column. Now add all the plus moments and all the minus ones and take their algebraic sum which will, in this case,



A theoretical curve of areas, showing the distribution of displacement

(Continued on page 70)

"GADGETS & GILHICKIES"

For More Comfortable Sitting

▶ We are indebted to J. E. Emmett, of Harryhogan, Virginia, for the accompanying description of a method of upholstering cabin seats and backrests. The description and the excellent drawings that Mr. Emmett sent in to illustrate his method are clear and should enable anyone who is handy with a tack hammer and a pair of scissors to do a creditable job. I consider this a real contribution to the comfort of cruising.

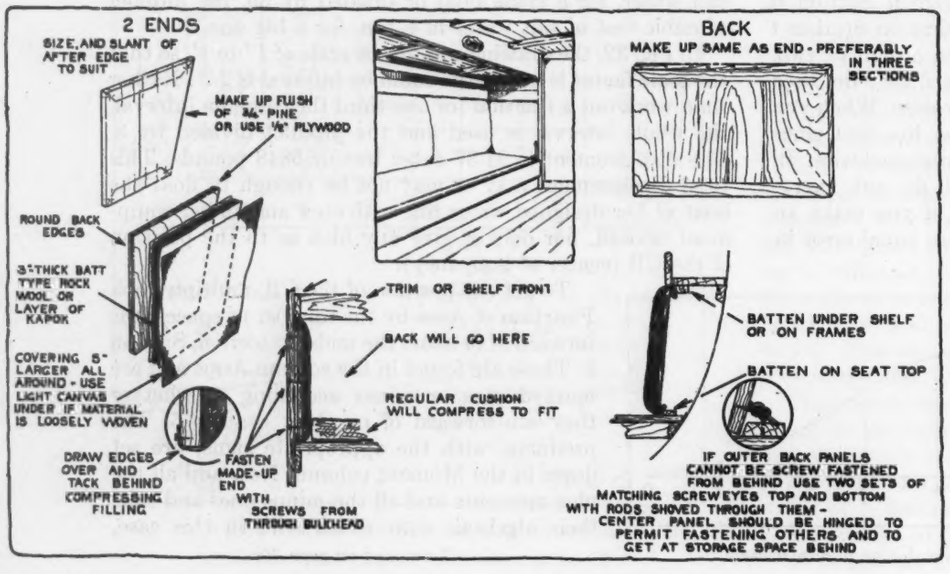
Padded ends and back make the usual berth more comfortable when used as a seat and add finish to a boat's cabin. The sketches show how these can be easily and economically built, either into new construction or added as an improvement to existing berths, wherever sides of a locker or a bulkhead will provide backing for the upholstered ends.

If the berth already has a back, the size and shape of the ends will be fixed; otherwise, the back should be planned to slant outwards slightly against either the frames or ceiling of the hull or a batten fastened under a shelf above. With the size and angle of the ends determined, make backing boards up flush as shown or use plywood, having them just large enough to be a snug fit after the upholstering material has been carried over their edges. Rock wool (3" batt type), with outer coverings left on, has been found satisfactory and will work in well now that kapok is scarce. A section of this should be cut the same size as the backing board but the upholstering material should be 5" larger all around, that is, 10" longer and wider than the board, to allow for thickness of filling and board in pulling the material over for tacking from behind. If a loosely woven fabric is used, it will be wise to have a layer of canvas of the same size under it to avoid any chance of the filling working or showing through: leatherette will not require this. Pull the material over snugly in tacking to compress the wool somewhat or spread out a layer of kapok, cutting V's at corners as required but no deeper than necessary.

The best way to fasten the made-up ends is simply to drive screws from the other side of the bulkhead or locker at end into the backing board. With these in place, boards for back panels should be gotten out of a size to just slip between the ends. The back will look best and be more easily fastened if made up in three sections or panels; then the center one can be hinged to get at the space behind. Each section is made up the same as the ends except as to size and shape, and the outer ones are fastened from behind, if possible. If this cannot be done, fit two sets of matching screweyes, top and bottom, into back and battens and slip lengths of rod through each set to hold in place. The center panel should be fitted last, preferably hinged at the bottom, and should be a snug enough fit between outer and under the shelf to stay up even with the boat heeled.

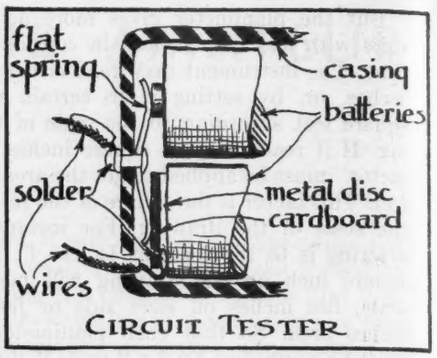
The old cushion will compress enough to crowd in as the filling pulled down under its covering does not shorten the berth noticeably. Simple envelop type slip covers, of the same upholstering material used, could be made to have old or worn cushions match new work. More heavily padded ends would be merely a matter of using thicker filling although the thinner ones shown are comfortable, take up little space and look shipshape.

In old work, trim should be added above and in front of end panels, to outline them and conceal their attachment to the bulkheads; in new construction, spaces can be left in building or paneling the berth ends.


2 ENDS
SIZE, AND SLANT OF AFTER EDGE TO SUIT
MAKE UP FLUSH OF ¾" PINE OR USE ½" PLYWOOD
ROUND BACK EDGES
3½" THICK BATT TYPE ROCK WOOL OR LAYER OF KAPOK
COVERING 5" LARGER ALL AROUND - USE LIGHT CANVAS UNDER IF MATERIAL IS LOOSELY WOVEN
DRAW EDGES OVER AND TACK BEHIND COMPRESSING FILLING
FASTEN MADE-UP END WITH SCREWS FROM THROUGH BULKHEAD
TRIM OR SHELF FRONT
BACK WILL GO HERE
REGULAR CUSHION WILL COMPRESS TO FIT
BACK
MAKE UP SAME AS END - PREFERABLY IN THREE SECTIONS
BATTEN UNDER SHELF OR ON FRAMES
BATTEN ON SEAT TOP
IF OUTER BACK PANELS CANNOT BE SCREW FASTENED FROM BEHIND USE TWO SETS OF MATCHING SCREWEYES TOP AND BOTTOM WITH RODS SHOVED THROUGH THEM - CENTER PANEL SHOULD BE HINGED TO PERMIT FASTENING OTHERS AND TO GET AT STORAGE SPACE BEHIND

A Handy Circuit Tester

▶ Last month, you may remember, I described a simple coil tester, the idea of Austin Murray, who wrote the excellent articles on Engine Tune-up appearing in the April and May issues. This month we are again obliged to Mr. Murray for a handy method of testing circuits.



CIRCUIT TESTER

The principal element of this device is one of those two-cell flash lights that strap to the user's wrist. In addition to the flash light, a couple of pieces of flexible electric wire about 24" long and two electric spring clips will be needed, also a bit of cardboard and a small piece of metal — brass, copper or zinc preferred. For tools, a drill, a knife and a soldering iron are all that are necessary.

The first operation in making this gadget is to remove the batteries from their housing. At the back of this housing will be found a flat spring which makes contact between the two batteries when they are in place. The principle of this circuit tester is simply to break the circuit at this point, making it travel through the two wires and the contact to be tested. If the flat spring is secured to the casing by a metal rivet, it will simply be necessary to solder one of the wires to the outside end of this rivet; otherwise drill a hole, using about a No. 30 drill, near the side of the spring, pass the end of one of the wires through and solder it to the spring on the inside.

Drill a similar hole near the outside edge of the back for the other wire. Pass the wire through the hole and solder it to a metal disc, which has been cut to fit the bottom of the battery (about 1" dia. will do). To one side of this disc cement a piece of cardboard to act as an insulator. In reassembling the unit, the cardboard side is placed against the flat spring, the zinc end of the battery is dropped into position in contact with the metal disc, then the other battery is dropped into position with the brass pole in contact with the flat spring. The spring clips are, of course, fastened securely to the other ends of the two testing wires.

Operation of this tester is simplicity itself. To determine the moment of explosion in one of your cylinders, for example, remove the high tension wire from the spark plug, clip one of the wires from the tester in its place and clip the other testing wire to the end of the high tension wire. Now, with the spark on, roll over your flywheel slowly by hand. When the light flashes, it will indicate the point of explosion which you may mark on the periphery of the flywheel for reference. There are many other ways in which this tester can be used and I feel that Mr. Murray has again given us a most helpful suggestion.

HAM DE FONTAINE

THE MONTH IN YACHTING

Some of the Coast Guard Academy's 12-footers at the float during the regatta at New London on May 1st

CAPTAIN KENNETH WHITING

▶ In the death of Captain Kenneth Whiting ("Ken" to all his friends and associates), the U. S. Navy has lost an officer of vision and of wide experience, and yachting was deprived of an ardent follower whose passion for sailing was exceeded only by that for the service to which he devoted his life. He passed away on April 24th at the age of sixty-one, at the Navy Medical Center, Bethesda, Md. Although he retired from the Navy in 1940, he was recalled to active duty when war threatened and at the time of his death he was in command of the Naval Air Station, Floyd Bennett Field, New York, and was, in addition, Aviation Officer of the Third Naval District.

As Ken Whiting's love of the sea and sailing showed itself at an early age and predated his entry to the Naval Academy, from which he graduated in 1905, it undoubtedly played a part in his subsequent career in the Navy. During his Midshipman days he excelled at sailing and racing in the boats then used at the Academy, and he was awarded the sword for the man who did most for his class in athletics. He played for four years on the varsity football team, and won championships in swimming and boxing.

Captain Kenneth Whiting, U.S.N.

It was, perhaps, his interest in sailing that was responsible for what was his most constructive work in the Navy, namely aviation, in which he early became interested. After several early years spent in submarines, during which he served with the Asiatic fleet, he entered the aviation branch of the service, then in its infancy, and was sent to Dayton, Ohio, where he was taught to fly by Orville Wright. He had the vision to see the part the airplane would play in warfare of the future, and he was one of the first officers to be assigned to the Naval Aviation Training School at Pensacola. During the First World War, he took an aeronautical detachment to France and later was in command of the U. S. Naval Air Station at Killinghame, England. When the Bureau of Aeronautics was organized in 1921, it was natural that Ken Whiting should be attached to it, and thereafter most of his assignments had to do with this branch of the service. After attending the Naval War College in 1932-3, he commanded the aircraft carrier *Langley*, and then the *Saratoga*, later going to Pearl Harbor as Commander of the Fleet Air Base there. Here he spent some four years and during his stay there found time for sailing in the "S" Class, in which he won the championship of the Pearl Harbor Yacht Club.

Useful and varied as his service in the Navy was, it was as a small boat sailor that most of us outside the service remember him. Whether sailing on the Sound with his brother "Butts" Whiting in the "Sixes," in the Interclubs or Internationals, or on the West Coast in 1928, when he raced with Henry Plant in the Six-Metre *Clytie*, or as late as last summer during Larchmont Race Week, he was always one who got keen enjoyment out of making a boat go as fast as she could. Nothing short of the best satisfied him.

It was natural, therefore, that he should have wanted to be buried at sea; in the waters on which he had sailed so often. After cremation, his ashes were committed to the sea just east of Execution Light as the stately schooner *Atlantic* moved past going westward and the *Vema* came by going to the eastward, while fifteen Navy planes made two passes over the yacht from which the services were held, and whence a bugler played taps. It was a fitting end for a sterling sailor.

Captain Whiting is survived by his wife and two daughters, a mother, Mrs. E. B. Whiting, and two brothers, Rear Admiral F. E. M. ("Red") Whiting and Butler Whiting, himself a nationally known yachtsman.

HAMPTON Y.C. OFFERS HOSPITALITY

▶ Commodore Paul Table and the flag officers of the Hampton Yacht Club, of Hampton, Va., will welcome and extend the privileges of that club to yachtsmen, connected with other clubs, who are in the armed forces of the United Nations and are now stationed in the vicinity of Hampton. In the past, the club has enjoyed many visits from yachtsmen on their way to and from the South.

I.C.Y.R.A. CHAMPIONSHIPS

▶ For the third successive spring, the Inter-Collegiate Y.R.A. Owen Trophy, Coast Guard Bowl, and the America Trophy events for the Eastern, New England, and Middle Atlantic Championships, respectively, were split three ways, but the Naval Academy sailors in retaining The America Trophy became the first team to repeat in these events which lead up to the national championships. The Coast Guard Academy succeeded Dartmouth as the holder of the George Owen Trophy, but the Coast Guard Academy Alumni Bowl was taken by Holy Cross.

In the Owen Trophy for the Eastern crown, Coast Guard won by only three and four points from Harvard and Yale with M.I.T., Cornell, Navy and Brown within easy hailing distance. In the New England Championships for the Coast Guard Alumni Bowl, five teams were only 12 points apart after 18 races. Navy had a slightly larger edge in The America Trophy, but Pennsylvania and Haverford were close enough to make things interesting.

The George Owen Trophy Regatta for the Eastern championship was held this year at New London, on April 18th, and was sailed in International 12-footers. Thus the contestants were sailing for the Owen in their third different type of dinghy in as many years.

The Coast Guard Academy crews scored their first win in an I.C.Y.R.A. championship, sailing well and avoiding fouls and mishaps which beset their chief rivals. Dave Noyes, of Harvard, was disqualified in the second race, and Cliff Lewis of Yale fouled out in the same contest. Harvard drew another setback when a contest, won by Johnny Burton, was resailed because of a shifted mark and the Crimson skipper took a fourth in the sailover.

Thus Coast Guard and Brown were early leaders, but about the fourth race in "B" division, Brown ran into trouble and faded rapidly. Meanwhile, Yale took the lead with a couple of races to go. Yale had a four-point advantage on Coast Guard which was two points ahead of Harvard at the start of the final race, but Gerry Daly of the Blue fouled a mark and withdrew. Commodore Norman Barlow, Coast Guard, had only to beat Burton of Harvard to win. He finished second with Burton third. The final score read: Coast Guard, 86; Harvard, 83; Yale, 82; M.I.T., 74; Navy and Cornell, 70 each; Brown, 66; Williams, 54; Pennsylvania, 51.

The Coast Guard Academy was again a host at a championship regatta two weeks later. This settled down to a five-team battle. Coast Guard, Harvard, M.I.T., and Yale ignored the threat of Holy Cross and, while the favorites were knocking one another off, the Crusaders sailed consistently.

M.I.T. enjoyed an early lead and was neck to neck with Yale until the seventh race, when Boericke capsized and Evans fouled out. Yale was the hard-luck team, for just when they caught Tech, halfway through the regatta, Lewis broke a rudder and, because of the crowded program, the officials ruled against a resail. Yale again went out in front only to have Daly drop out on a foul.

This put Holy Cross a point and a half ahead of Yale with Harvard, M.I.T., and Coast Guard all close. Macdonald twice came from behind to preserve a ½-point margin for Holy Cross. The final score was: Holy Cross, 135½; Yale, 134; Harvard, 130; M.I.T., 127; Coast Guard, 123; North Eastern 98; Williams, 90½; Dartmouth, 69; New Hampshire, 37. Coast Guard's Daniel was high point man with 79 points; Macdonald totalled 75½, leading the second division.

Six colleges sought The America Trophy at Navy, May 1st-2nd. The Midshipmen trailed Haverford, 24-23, after the first day's racing on the strength of two victories by Jonathan Bushnell. On Sunday, Captain Roger Fontaine, of Navy, won four straight races in the International 14-footers in the first division, while in the second division, Bushnell, who won the regatta high point honors, outsailed Fontaine's teammates by a shade. A foul dropped Haverford into third place. Second honors were taken by Pennsylvania as Fox gave his best performance yet with good support in the second division from Horace Hepburn.

Bushnell took the individual high point honors with 38 points. The final team score in The America Trophy was: Navy, 74; Pennsylvania, 65; Haverford, 59; Lehigh, 46; Lafayette, 41; and Stevens Tech, 31.

LEONARD M. FOWLE

GOOD PROSPECTS FOR THE CHESAPEAKE

▶ It's significant that this season will find two yachting centers in the Chesapeake Bay country, Annapolis and Washington, taking the lead in what promises to be a successful sailing year despite wartime restrictions.

As early as last December, the keynote for Bay yachting during 1943 came from Capt. Kemp C. Christian, U.S.N., commanding the Naval Academy Y.S. Speaking at the annual meeting of Chesapeake Bay Y.R.A., he told delegates it was the hope at the Academy that the sport would continue on the Bay, and he stressed the importance of carrying on.

The Academy's big boat fleet, which includes *Vamarie*, *Freedom*, *Highland Light*, *Spindrift* and the sister yawls, *Alert*, *Intrepid*, *Resolute*, *Active*, *Frolic* and *Restless*, has been in commission for more than a month. The fleet of Stars, 14′ International dinghies, whaleboats and knockabouts has been going strong for some time, too, and is expected to participate in Annapolis Y.C. annual regatta.

Six more yawls, also from the designs of Luders, are expected to be added to the Navy's growing flotilla of racing craft. They are *Dandy*, *Fearless*, *Flirt*, *Lively*, *Swift* and *Vigilant*.

CBYRA's secretary-treasurer, Hal Loweree, recently completed a survey of yacht owners to determine the extent of their interest in racing this year. Counting the Naval Academy boats, it was found that there will be four yachts racing in Class A, fifteen in Class B and seven in Class C. At least two yachts indicated appearance in the Racing Division, four in the Delta Class and a number of starters in the Star, Comet, Penguin and Chesapeake Twenties Classes.

From John R. Sherwood, commodore of Gibson Island Y.S., comes word that the club is going ahead with its scheduled events. Gibson Island anticipates as many boats as last year. Great activity is promised in the Island's junior fleet, with Nat Kenney again holding forth as "coach."

Sailing at Washington now promises to be one of the town's major sports. At this writing, the Potomac River S.A. is about to begin its annual series of Sunday races off Hains Point. Capital Y.C., home club of some of the Bay's best small boat skippers, has had to turn down men and women seeking berths for their sail boats. Two other local clubs, Columbia and Corinthian, appear to be nearing the saturation point in docking facilities for small craft, too.

It may even come to the point where boats will have to be stored on club grounds in Washington, with skippers putting them overboard only on Sundays. The P.R.S.A., in fact, has already taken this into consideration and has modified its ban against haul-outs during a series.

Over on the Eastern Shore yachtsmen are moving cautiously, but still are making plans with the emphasis on local racing.

MALCOLM D. LAMBORNE, JR.

GULF Y.A. NOTES

▶ Leslie P. Beard, commodore of the Southern Y.C., New Orleans, La., was reëlected president of the Gulf Y.A. at its annual meeting in Biloxi, Miss., May 2nd. Major Frank B. Wood, of the St. Andrews Bay Y.C., of Panama City, Fla., vice president, and Clarence G. Ferguson, also of the Southern Y.C., secretary-treasurer, were also reëlected.

Decision to suspend the annual junior Fish Class championship race series for the duration and to stage the 23rd annual Sir Thomas Lipton Trophy interclub Fish Class championship series at Pensacola, Fla., September 4th, 5th and 6th (with certain changes in the rules to meet wartime conditions) were the major developments of the meeting.

The usual Mississippi Gulf Coast Race Week regattas are a wartime casualty. Because their clubhouses and harbor facilities are now occupied by different branches of the service, the Biloxi, Gulfport and Pass Christian clubs did not apply for regatta dates this summer.

Schedule of events sanctioned at the G.Y.A. meeting included the Southern Y.C. annual long distance sail race, scheduled from New Orleans to Mobile, July 2nd–4th; Southern Y.C. annual Cross-Lake Pontchartrain sail race and motor boat cruise to the Tchefuncta River and return, June 26th and 27th; and the annual Bernard C. Knost Trophy all-skipperette Fish Class series, off Pass Christian, Miss., July 11th.

Attending the meeting, besides the officers elected, were: Wallace W. Chapman, commodore, Biloxi Y.C.; Fred Clarke, Buccaneer Y.C., Mobile; Thomas P. Krouter, commodore, Mobile Y.C.; Harry Wittman, Pass Christian Y.C.; Rox Cowley, commodore, Pensacola Y.C., and Earl C. Gay, Gulfport Y.C.

VAL J. FLANAGAN

CAUTIOUS CONRAD

CALENDAR

June 12–13 — Annual Frostbite Sweepstakes, Toledo Y.C.
July 24 — Falcon Cup Race, Rocky River-Mentor Harbor, Mentor Harbor Y.C.
August 1 — Annual Regatta, Cleveland Y.C.
August 8–12 — I.L.Y.A., Anniversary Regatta, Put-In-Bay, Ohio.
August 14–15 — Annual South Shore Regatta, Vermilion Y.C.
September 4–6 — Twenty-third Annual Fish Class Championship, Sir Thomas Lipton Trophy, Gulf Y.A., Pensacola, Fla.

Lake Michigan Y.A.

June 19 — Annual Michigan City Race, Columbia Y.C., Chicago.
June 26–27 — Star Class Invitational Regatta, Jackson Park Y.C., Chicago.
July 2 — Annual Saugatuck Race, Jackson Park Y.C.
July 3–4–5 — Star Class, Sterling Morton Trophy Race, Chicago Y.C.
July 3–4–5 — Annual Garden Bay Race, Escanaba Y.C.
July 4 — Annual Lake Macatawa-Chicago Race, Chicago Y.C.
July 17 — Chicago-Mackinac Race, Chicago Y.C.
July 18 — Midsummer Regatta, Sea Gull Finals and 21-Mile Island Race, Escanaba Y.C.
July 24–25 — Annual 100-mile Race, M & M Y.C.
July 27–August 1 — Annual Cruising Race, Escanaba Y.C.
July 31-August 1 — Virginia Trophy and Milwaukee Journal Regatta, Milwaukee and South Shore Yacht Clubs.
August 5–6–7 — Lipton, Nutting, Gehrmann Trophy Races for R, S and Tumlaren Classes, Chicago Y.C.
August 14–15 — Green Star Championships, Chicago.
August 15 — Regatta, South Shore Y.C., Milwaukee.
August 20–21 — Great Lakes Star Championships, Sheridan Shore Y.C., Chicago.
August 22 — Annual Wind Point Race, Milwaukee Y.C.
August 23–28 — International Star Class Races, Chicago (Tentative).
August 29 — Annual L.M.Y.A. Regatta at Chicago.
September 3–6 — Tri-State Race, Chicago-St. Joseph-Michigan City-Chicago, Chicago, Columbia and Jackson Park Y.C.
September 4–6 — Star Class Shipping Board Trophy Races, Chicago.
September 11–12 — Lutz Trophy Race, Class Q (Eight-Metres to rate as Q's), Jackson Park Y.C.
September 19 — Annual Sheldon Clark Regatta, Chicago Y.C.

Y.R.A. of Long Island Sound Championship Races

June 6 — Larchmont Y.C.
June 13 — Manhasset Bay Y.C.
June 20 — Knickerbocker Y.C.
June 27 — Seawanhaka Corinthian Y.C.
July 3 — Horseshoe Harbor Y.C.
July 4 — New Rochelle Y.C.
July 5 — Larchmont Y.C.
July 11 — Indian Harbor Y.C.
July 18 — American Y.C.
July 25 — Stamford Y.C.
August 1 — Larchmont Y.C.
August 8 — Riverside Y.C.
August 15 — Huguenot Y.C.
August 22 — New York A.C.
August 29 — Port Washington Y.C.
September 5 — Seawanhaka Corinthian Y.C.
September 6 — Larchmont Y.C.
September 12 — Manhasset Bay Y.C.
September 19 — Indian Harbor Y.C.
September 26 — Horseshoe Harbor Y.C.

Non-Championship Races

June 5 — Larchmont Y.C.
June 12 — Manhasset Bay Y.C.
June 19 — Larchmont Y.C.
June 26 — Horseshoe Harbor Y.C.
July 10 — Echo Bay Y.C.
July 17 — Horseshoe Harbor Y.C.
July 24 — Manhasset Bay Y.C.
July 31 — Larchmont Y.C.
August 7 — Riverside Y.C.
August 14 — Manhasset Bay Y.C.
August 21 — Horseshoe Harbor Y.C.
August 28 — New Rochelle Y.C.
September 4 — Larchmont Y.C.
September 11 — Manhasset Bay Y.C.
September 18 — Indian Harbor Y.C.
September 25 — Horseshoe Harbor Y.C.

Chesapeake Bay Y.R.A.

June 5–6 — Small Boat Regatta, Maryland Y.C.
June 6 — Regatta, Naval Academy Y.S.
June 12–13 — Rhode River Rendezvous, Gibson Island Y.S.
June 12–13 — Regatta, Baltimore Y.C.
June 19–20 — Trophy Race, Potapskut S.A.
June 26–27 — Regatta, Fairhaven S.C. (Tentative).
June 27 — Regatta, Potapskut S.A.
July 3–4 — Regatta, Rock Hall Y.C. (Tentative).
July 4 — Regatta, Hampton Y.C.
July 10 — Gibson Island-Annapolis Race, Annapolis Y.C.
July 10 — West River-Annapolis Race.
July 10–11 — Regatta, Annapolis Y.C.
July 17–18 — Regatta, J. Rulon Miller Series for Stars, Gibson Island Y.S.
July 24–25 — Regatta, Chester Y. & C.C. (Tentative).
July 25 — Poplar Island Race, Gibson Island Y.S.
July 31-August 1 — Regatta, Cambridge Y.C. (Tentative).
August 6–7 — Regatta, Miles River Y.C.
August 8 — Race Back from Miles River, Maryland Y.C. (Tentative).
August 13 — Gibson Island-Oxford Race, Chesapeake Bay Y.C.
August 13–15 — Regatta, Tred Avon Y.C.
August 14–15 — Races, Chesapeake Bay Y.C.
August 21–22 — Regatta, Sparrows Point Y.C. (Tentative).
August 28 — Races, Naval Academy Y.S.
August 28–29 — Regatta, Indian Landing B.C.
August 28–29 — Regatta, Rappahannock Y.C.
September 4 — Cedar Point Race, Gibson Island Y.S.
September 5–6 — Regatta, West River S.C.
September 11–12 — Regatta, Urbanna Y.C.
September 11–12 — Regatta, Elk River Y.C.
September 12 — Regatta, Maryland Y.C. (Tentative).
September 18–19 — Regatta, Potomac River S.A. (Tentative).
October 3 — Start of Fall Series, Annapolis Y.C.

THE SKIPPER'S SLOP CHEST

There are guys who've written stories, and most o' them were true,
Of the old time sailin' ships and the men that manned them too,
And the seven seas they sailed across, and them furrin ports o' call.
They allus sets my heart a'longin' for — Gawd, *I've* knowed them all.

These stories o' them clipper ships keep fresh the deep sea lore,
And tell o' stirrin' days afloat and roarin' nights ashore;
O' calms and gales and hurricanes and icebergs and the rest
But ne'er a song 'ave I heard sung o' the skipper's old slop chest.

There's many a time the old slop chest 'as been a sailor's friend
When 'e's been a'stranded on the beach with nary a cent to spend,
For 'e'd blown 'is pay to 'ave 'is fun and pawned 'is clothes to eat,
Then signed on for the homeward voyage without a shoe to 'is feet.

The slop chest's down the lazaret in the old man's tender care
All full o' old and shopworn duds, not *all* the worse for wear;
There's slightly worn pin stripe pants, and reefer coats as well,
And shirts and socks and woolen mitts and odd sea boots to sell;

And flannel drawers and dungarees and coats of every kind,
And sweaters and downeaster caps and woolen shirts you'll find.
There's mouldy yellow oilskins and sou'westers stiff as boards:
Oh, it's every kind o' trooso that the skipper's slop chest hoards.

There's Riley on the fo'c's'le head a'cattin' o' the anchor,
In a flappin' blacktailed Albert coat that once dolled up a banker,
And Olaf doin' 'is wheel stand to, a'lookin' just a treat,
A'wearin' fore royal canvas pants — a mains'l patch on 'is seat.

Whate'er the stories o' them duds the slop chest's got for sale,
They've kept many a dead broke sailor warm in a howlin' winter's gale;
So don't you growl, you shellbacks — it's the old man's perquisite,
And don't begrudge the price you pay — 'e tries to treat you right.

So tumble aft you sailor men and see wot the slop chest's got,
And pick the duds you're short of afore the old man's sold the lot.
Oh, there's thin stuff for the tropics and thick stuff for the Horn,
And maybe you'll find a shoregoin' suit which ain't so badly worn.

You'll need no cash for them old duds — the old man docks your pay,
And for half the voyage you'll be workin' off the dead 'orse every day.
But when the voyage is over and the ship tied up to rest,
You'll pass a vote o' gratitude to the skipper's old slop chest.

With three months' pay you'll go ashore in a suit o' navy blue,
And a sailor's cap a'slant your eye to meet your sweetheart Sue,
And you'll take 'er out to sing and dance, a'mixin' with the best
And thank your stars you found a friend in the skipper's old slop chest.

THOMAS YATES-SMITH

"MOCKING BIRD"

By RALPH H. WILEY

IN FORMING your opinion of *Mocking Bird*, please be guided by your careful study of the plans and your own judgment of what a good small boat should be, rather than by this written word. In reading this description, you will wisely make allowances for pride of ownership, to which is added pride of design and pride of craft, for *Mocking Bird's* owner, designer and builder are all stuffed into one well worn but still waterproof old skin. On the other hand, after making due allowances for the personal equation, please consider the plans presented as the final result of the building of three almost identical boats over a period of the past three years, each boat incorporating such refinements as were suggested by actual sailing experience. The story of performance is sometimes better when written from just a set of plans rather than from the actual boat that has been built and sailed.

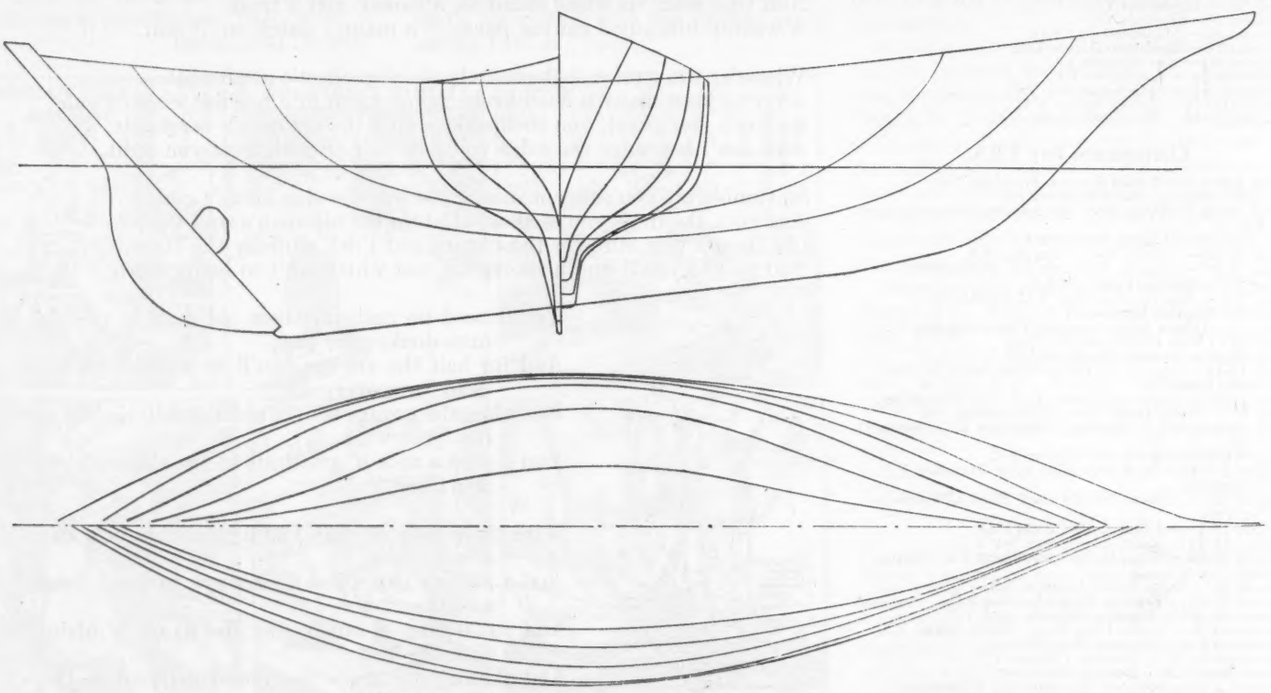
Also, in forming your opinion, you may omit the usual commercial. If any boatbuilder has ever consistently made a profit building small sail boats, the loot has been well hidden. The price per pound of a small boat is higher than for a large one. The time of laying down is practically the same, there are just about as many pieces that can be made wrong, there are as many hatches in a 30-footer as in a 40-footer and, though the cost always seems too high, the builder usually has his trouble for his pains. The owner is justified in the high initial investment for, once this obstacle is overcome, he has the lasting economy of low maintenance and the joy of owning a vessel that he can handle alone at all times. Good company is a pleasure indeed but a lot of good sailing will pass you by if you are dependent on friends to help handle your boat.

The incentive for the design was the Tancook whaler. Interest in the type was first aroused by an article "The Passing of the Tancook Whaler," in YACHTING for February, 1933, wherein Ernest A. Bell presented an excellent description of these boats, accompanied by a set of lines and a sail plan so beautiful as to command immediate and lasting interest. Subsequently, one of our good customers left a whaler with us for two winters and a careful study of her lines, of her performance under all conditions, and of such modifications as would seem advisable in a pleasure boat, preceded the drawing of these plans. In profile, in ratio of length, draft and beam, and in her rather slender double-end hull, *Mocking Bird* resembles this type but diverges widely in carrying all her ballast outside and in her entirely modern sail plan. The hull above water gives every indication that she is just a nice, old-fashioned girl but, if a playful breeze should lift her skirts ever so slightly, you will be shocked by the sophisticated shapeliness of her underbody.

Many conventional boats are planned to fit some current racing rule and, if the architect is to turn out a winner, he must chisel the rule in every possible way. Self-sailing ability, ability to lie at anchor quietly, conservatism of rig, moderate draft and a dozen other things are lost sight of in trying to build a boat that will get the lowest possible rating for her speed. *Mocking Bird* is truly unconventional, was designed without regard to rule and rates rather poorly. If racing only is your ambition, frankly, you should choose the most cheatingest rule cheater to be found.

However, in disregarding the racing angle, the designer puts himself on the spot. He is left with an entirely free hand to design a boat that is comfortable, handy, sea-kindly, and fast on all points of sailing. This is definitely his job and he has no business hiding behind the old excuse that designing a boat is a matter of blending a whole mess of compromises. Ability to go to windward fast is a definite advantage and yachtsmen who boast of their slow, comfortable cruisers that can reach and run but always use the engine going to windward, are really suffering from an inferiority complex.

It is unwise to put full headroom in a boat that is only 31 feet over all length, 8 feet beam and 4 feet 6 inches draft. It seems better to plan the details on the premise that sitting down is to be really comfortable. The flush deck construction means that you can lean back against the lockers without hitting the back of your head. Other advantages are quite obvious: strength in the way of the mast, a roomy deck, simple, watertight construction, and space around the cockpit double what it would be with the conventional coaming. The cabin cushions also fit quite nicely in the cockpit and, in one of the boats, these cushions are made double, two cushions of 2½-inch Latex nesting



The lines are sweet and easy and the boat is fast and handy

The plans reproduced in this section are the property of the designer under whose name they appear. For further information concerning any design address the naval architect in question.

The rig is simple and the mainsail is small and easily handled

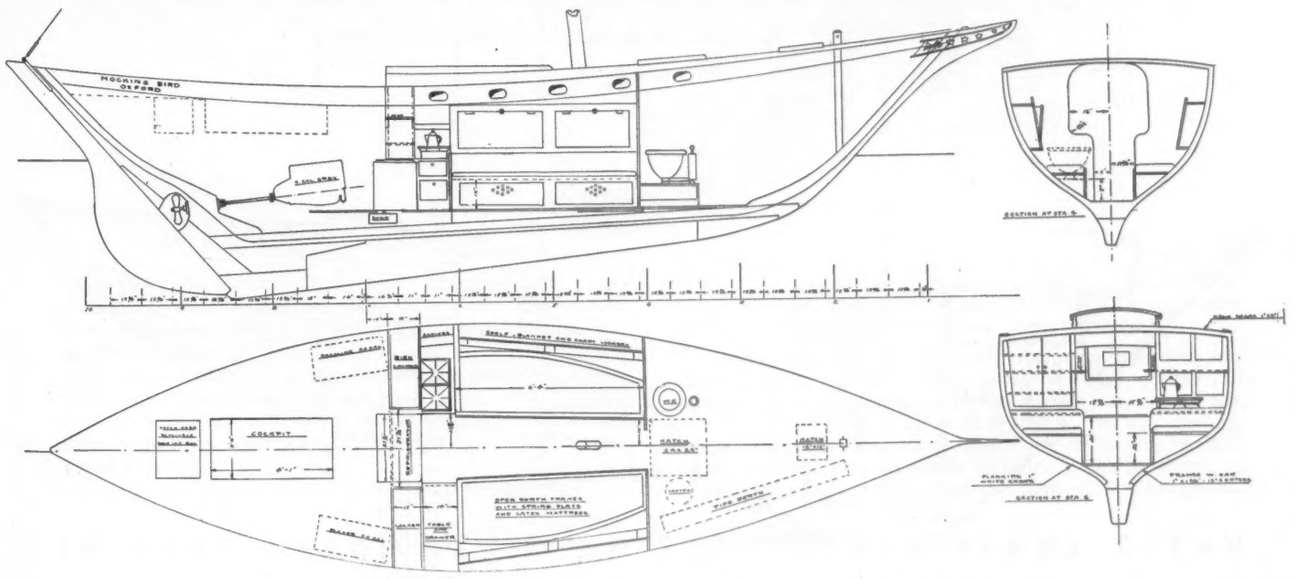
one on top of the other so that the upper set can be used for sleeping on deck.

The layout is primarily for two persons though there is a good pipe berth forward where, you will note, there is also a heating stove and ample room for stowage of sails and gear. There is a step on each side of the companionway which means that there is always a good side to go down when the boat is heeled and there is nothing to move to get at the motor. A portable seat between these steps makes a fine place to sit with just head and shoulders above the hatch. The refrigerator is a standard box, about 20 inches high, whose top provides additional table space for the galley. The lockers behind the seats are for stowage of blankets and charts and two of the locker doors serve as a cabin table when placed thwartships from the lockers to the mast. Ample ventilation is provided by two hatches that scoop in a generous amount of air.

On deck, everything is free and clear and the plans in this respect need little explanation. The removable ice chest, sunk in the after deck, is a great convenience and greatly prolongs the life of the ice in the galley. The cockpit is just wide enough for a comfortable foot brace and the boom crotch is hinged permanently at each rail so that, when not in use, it swings down and rests against the backstay. The bowsprit is long enough for convenient handling of the anchor and the permanent backstay chain plate is on the pivot point of the rudder so that the tiller simply revolves around it.

Mocking Bird's rig is simple in the extreme and, being a true cutter, the mainsail is small and easily handled. The genoa, with Merriman jib furling gear and halliard reel, is the one extravagance and, while not an original idea, is uncommon enough to bear explanation. The reel allows the sail to be set so that the luff stands just as well as though bent on a stay. When the sail is unbent, the halliard is lowered and secured to the bowsprit and becomes a headstay. This contrivance not only makes the genoa a one man cruising sail but retains all the advantages and security of a double head rig. Going about is a simple matter of rolling up enough sail to enable it to blow across. The boat sails well to windward with both headsails set and the genoa can be broken out or furled with changing wind conditions without leaving the cockpit; when it is furled, the boat is immediately under a short, handy rig. By slacking the halliard and unsnapping the tack, the genoa becomes a convenient and serviceable cruising parachute spinnaker.

In closing, a brief statement of performance is in order. *Mocking Bird* will sail herself on all points of sailing without micrometer adjustment of sheets. Her tiller can be held with one finger in any weather, and on any course, and there is never more helm than just a comfortable feel. She has logged 50 nautical miles, close-hauled in rough water, in nine hours. During three years of sailing, it has never been necessary to reef beyond rolling up the genoa nor to put on an oilskin because of spray. *Mocking Bird* has no meanness in her makeup and is as safe as any vessel of her size. She and her sisters have served their owners well and the simple fact that none of them have ever been offered for sale is probably the best measure of performance.



The cabin was laid out primarily for two persons though there is a pipe berth in the forecastle

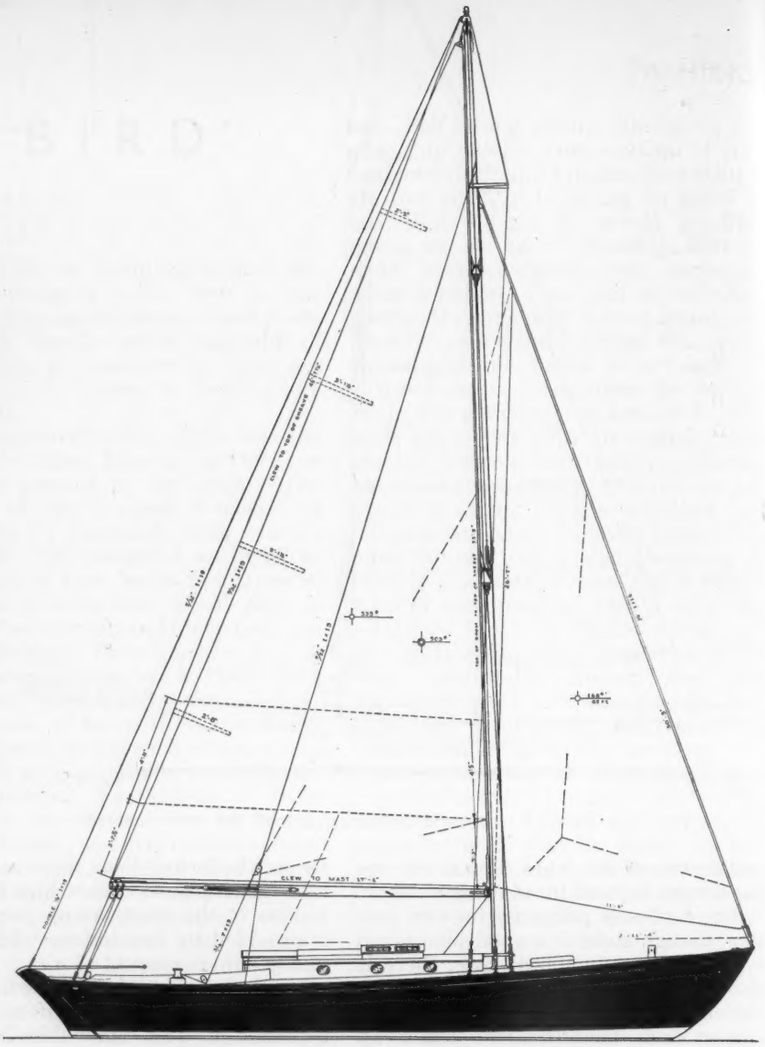
"TEMPERANCE"

HERE are the sail and arrangement plans of a smart cruiser from the boards of Sparkman & Stephens, Inc. She is *Temperance*, built by the Kretzer Boat Works, of City Island, New York, in the spring of 1939 for Donald M. Laflin, of Larchmont. In service, she has proven herself to be a smart and successful small boat. Actually, her lines are duplicates of those of the *Nugget*, built from Sparkman & Stephens' design several years ago for H. W. Buck. *Temperance*, however, differs from the older boat in sail plan and cabin layout. Her sail area works out at 503 square feet with a mainsail just about the size of that of a Six-Metre and a fore triangle slightly larger than that of the usual "Six."

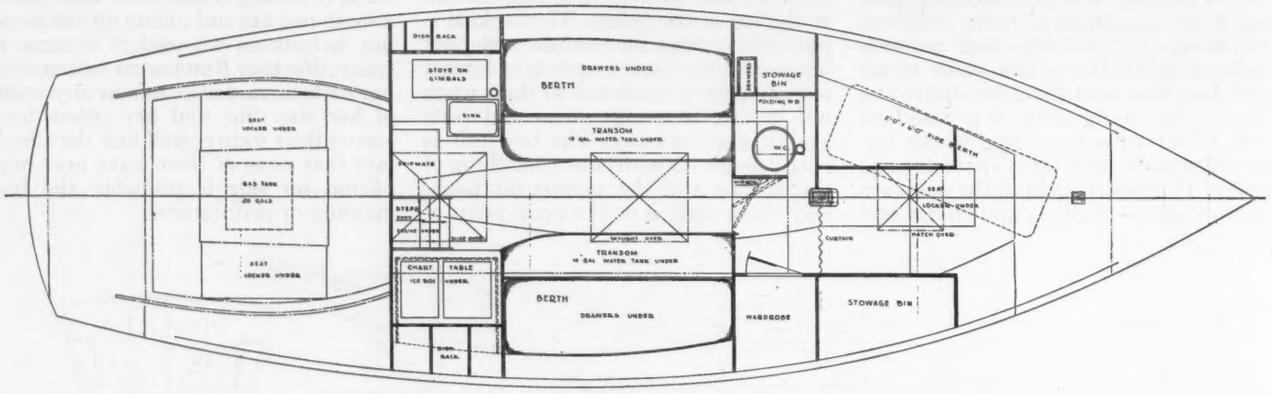
Her principal dimensions are as follows: Length over all, 33′ 3″; length on the water line, 26′ 0″; beam, 10′ ½″; draft, 5′ 0″. Hull construction is high grade. As auxiliary power, she carries a Gray 4–22 gasoline engine located on the center line and driving the propeller direct. A 20-gallon gasoline tank is fitted under the floor of the cockpit and two 15-gallon fresh water tanks are installed in the cabin, under the transoms on each side.

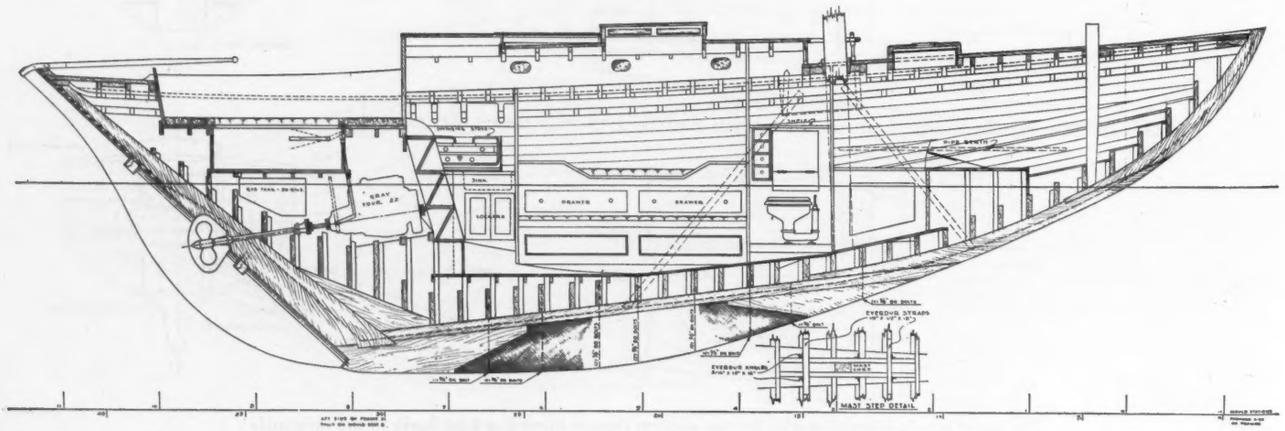
The arrangement plan is more or less conventional — which means practical — but the boat has a deep, comfortable cockpit. The trunk cabin is cut off just abaft the mast instead of being carried forward as it is in so many of the smaller boats. This, of course, has the disadvantage of restricting headroom slightly forward of the mast but makes for attractive appearance and gives a fine forward deck on which there is plenty of room to handle light canvas.

Her designer says of her: "While it is presumably out of the question for anybody to build a boat like this today, this is certainly the size and type of boat which is in great demand in the second-hand market and probably will be wanted when building starts up again after the war."



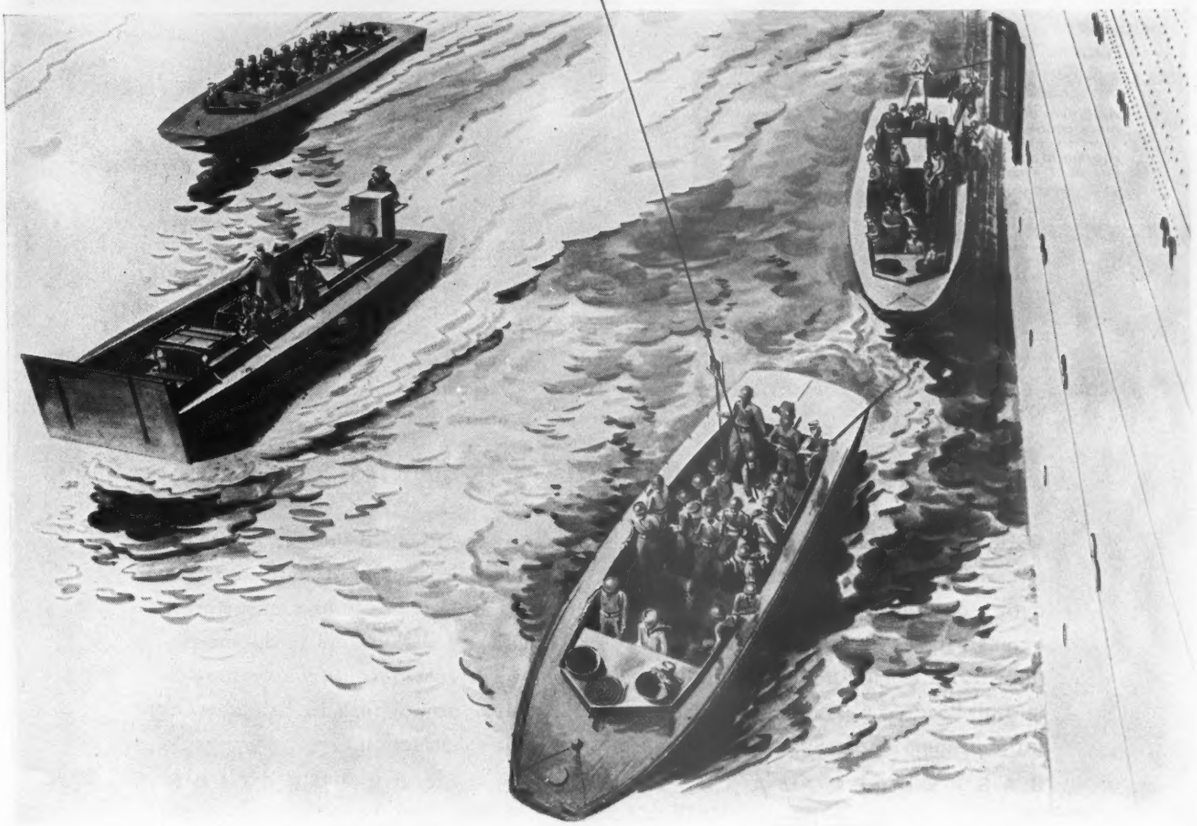
Sail plan and, below, accommodation plan of "Temperance"





CHAMPION SPARK PLUGS

provide the vitalizing, energizing sparks that set and keep tens of thousands of marine engines throbbing on their way for our armed forces in waters all over the world.



Never before in history have so many troops and their supplies been water-borne in such large mass movements. Never before has there been a war which was a marine war on such a vast scale.

Motor boats with their extreme versatility—easy maneuverability, high speed and ability to negotiate coastal waterways in both deep and shoal water—are an integral and primary part of the history that is being written by our armed forces.

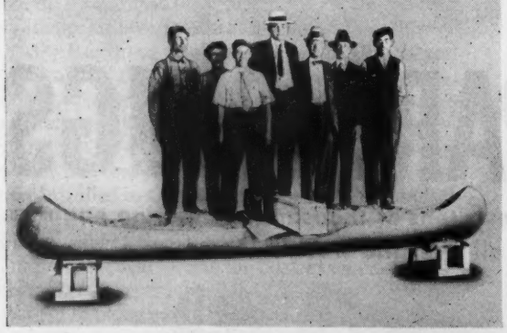
Ever since the internal combustion marine engine came into its own, Champion Spark Plugs have been prime favorites with engineers, and boat owners alike because they insure the ultimate in performance and dependability.

Champions are "in the service" with our armed forces wherever they may be, and Champion-equipped marine engines are daily setting records, which may never get into the record books, but which are records nonetheless, because they are performed under war conditions involving unequalled hazards—life and death. We're proud to say, as we have for years—you can depend on Champions.

TO SAVE GASOLINE—KEEP YOUR SPARK PLUGS CLEAN

2 WARS: 2 BOATS

WORLD WAR I
Henry Haskell was successfully laminating wood veneers over molds to produce a one-piece canoe remarkable for light weight strength.



A 26-year old Haskell one-piece canoe still in service gives an impressive demonstration of the durability of this light weight material.

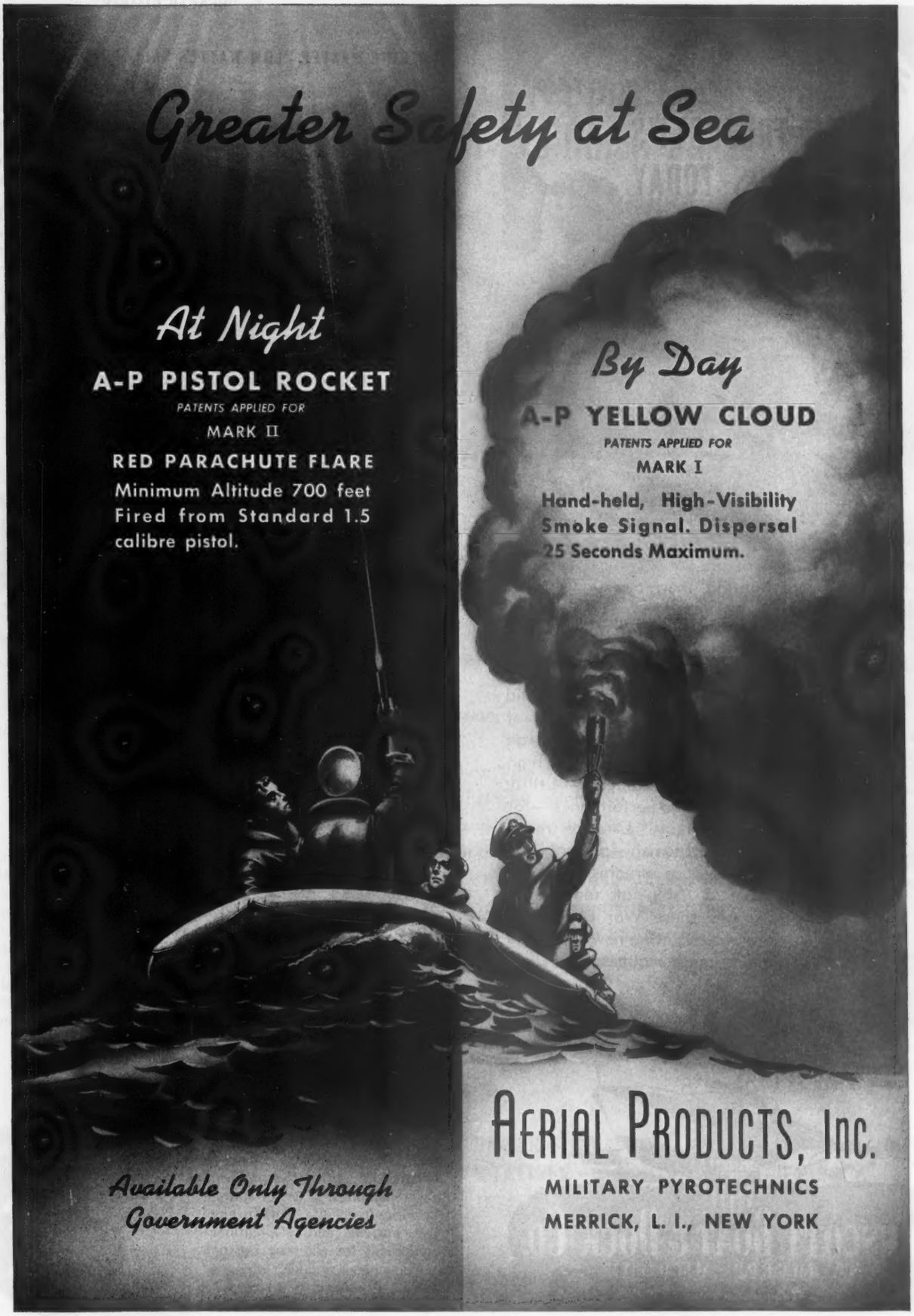
WORLD WAR II
The modern Haskelite Plywood and Plymold used in these large sturdy Higgins PT Boats is built to withstand the buffeting of heavy seas at high speeds.

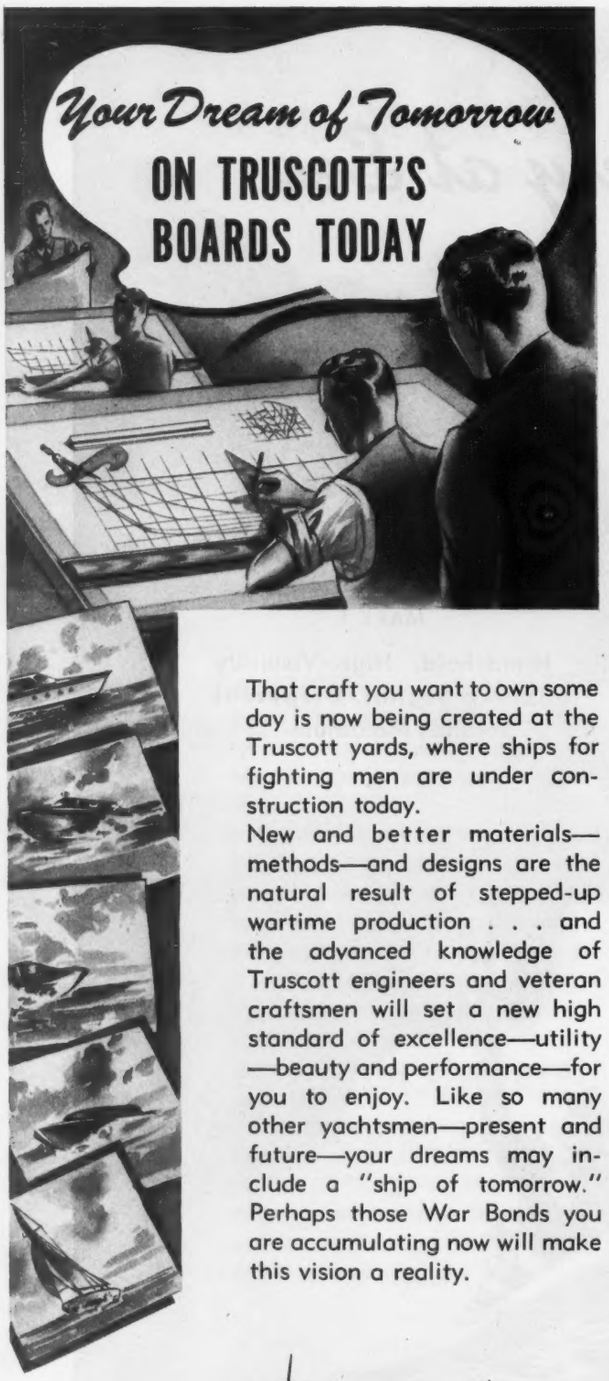
A Quarter Century of Progress by HASKELITE

● Haskelite Marine Plywood, a development pioneered by this Company over a quarter of a century ago, is now extensively used in the boat-building industry. It is used not only in hulls but in bulkheads, superstructures and interior fittings. Many of its applications are made by the Plymold Process by which the material is molded in one piece to the required compound curvatures.

It will pay all builders in the marine field to investigate the advantages Haskelite now offers in the newest types of construction.

HASKELITE MANUFACTURING CORPORATION
Grand Rapids, Michigan
Chicago, Illinois • Detroit, Michigan • New York City


Greater Safety at Sea
At Night
A-P PISTOL ROCKET
PATENTS APPLIED FOR
MARK II
RED PARACHUTE FLARE
Minimum Altitude 700 feet
Fired from Standard 1.5
calibre pistol.
By Day
A-P YELLOW CLOUD
PATENTS APPLIED FOR
MARK I
Hand-held, High-Visibility
Smoke Signal. Dispersal
25 Seconds Maximum.
Available Only Through
Government Agencies
AERIAL PRODUCTS, Inc.
MILITARY PYROTECHNICS
MERRICK, L. I., NEW YORK



That craft you want to own some day is now being created at the Truscott yards, where ships for fighting men are under construction today.

New and better materials—methods—and designs are the natural result of stepped-up wartime production . . . and the advanced knowledge of Truscott engineers and veteran craftsmen will set a new high standard of excellence—utility—beauty and performance—for you to enjoy. Like so many other yachtsmen—present and future—your dreams may include a "ship of tomorrow." Perhaps those War Bonds you are accumulating now will make this vision a reality.

WATERFRONT NEWS

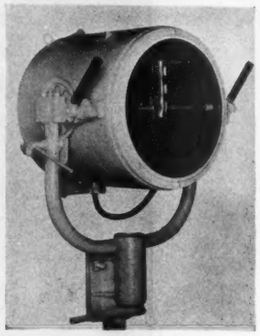
By "BEACHCOMBER"

MARINE MASTER "LOW WATTER" ELECTRIC RANGE

▶ Especially designed for small auxiliary vessels is the new full-width heavy duty electric range for installations having limited generating capacity recently announced by Electromaster, Inc.

Specifications for the "Low Watter" include a full size oven with two oven units, each 2 kw.; an automatic oven thermostat; removable sea rack, guard rail, and four round surface units, each 2 kw. This surface equipment may be replaced by any of several different surface combinations at the purchaser's option. Manufactured by Electromaster, Inc., 1809 East Atwater, Detroit, Mich.

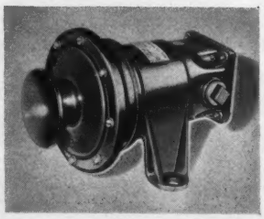
ALL-WELDED MARINE SIGNALING SEARCHLIGHT



▶ A 12-inch signaling searchlight with an all-welded construction designed especially to withstand shipboard vibration and sudden shock has been announced by the Lighting Division of the General Electric Co.

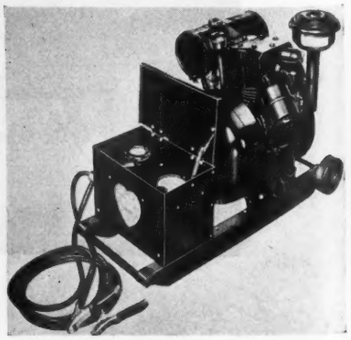
It is made of bonderized steel and has a durable marine gray finish over rust-resistant zinc chromate primer. The shutter, which can be operated from either side of the drum, has been tested to withstand more than two million operations at the rate of 180 operations per minute. The supporting trunnion arms are of heavy steel tubing, and are welded to other parts of the mounting assembly to form a one-piece construction which eliminates the danger of loosened joints due to rough weather and other adverse conditions. General Electric Co., Schenectady, N. Y.

BENJAMIN MOTOR-OPERATED HORNS



▶ Benjamin Navy Type Horns H-8 and H-9 are designed to equal or better Bureau of Ships specifications for such equipment. Driven by a series motor, the sound is produced by a cam on the end of the armature shaft striking an anvil fastened to the diaphragm. The sound response is immediate when the motor is energized and stops instantly when the motor is de-energized. Benjamin Electric Manufacturing Co., Department MN 21, Des Plaines, Illinois.

PORTABLE GASOLINE-DRIVEN GENERATOR



▶ The new Hunter-Hartman gasoline-driven generator, designed for battery charging, is said to eliminate many of the problems accompanying the use of storage batteries in operations where electric current and conventional equipment for charging are not conveniently available.

The equipment is designed to charge 6, 12, 24 volt batteries at 10 to 300 amperes. It consists of a specially designed generator driven by a 6 hp. single-cylinder, air cooled, gasoline engine which is

★ The boat that might have taken your gay little party up the coast for a clam-bake, or over to the island's shady beach for a leisurely luncheon, is now landing fighting men of the United Nations on distant shores. And that's no picnic! No picnic either has been the work of the men and women building the Scripps marine engines that power many of these landing boats. Relentlessly they have carried on, inspired by the spirit and sacrifices of the armed forces. With their products tested in the laboratories of war, they have learned to build even better performance into Scripps engines. It's the kind of performance you'll want from your peace-time engine.

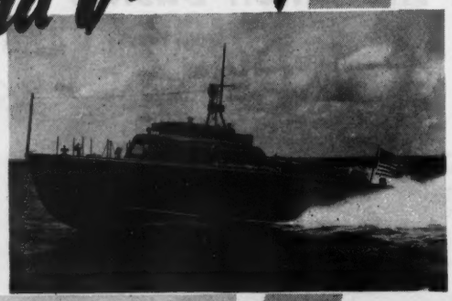
Did you buy that extra War Bond today?

Scripps

GASOLINE AND DIESEL MARINE ENGINES
V-TWELVES • V-EIGHTS • SIXES • FOURS
TWENTY-FIVE TO SIX HUNDRED* HORSEPOWER

SCRIPPS MOTOR COMPANY • 5817 LINCOLN AVENUE • DETROIT • MICHIGAN

Vessels of Vengeance and Victory



Aircraft rescue boat, fast new craft built by Harbor Boat.

Torpedo boat, built by Harbor, says "Bottoms Up" to Axis navies.

Ruggedly built for hard, dangerous work is this Harbor Mine Sweeper.

Sub-chaser, Harbor-built, helps free the seas for Allied shipping.

VESSELS you're buying now with war bonds... your investment in fast, versatile fighters with a sting in their tails that the Axis will long remember. The facilities and practical experience gained in record "E" production of these fighting boats will yield rich returns when Victory comes, and you are ready to apply your bonds toward the purchase of a new peacetime Harbor boat. Amazing new efficiency... new developments in hull design, in aerodynamics and in construction methods ... new power, speed and stamina... these are not mere words, but realities already achieved at Harbor Boat Building Co.

HARBOR BOAT BUILDING CO.

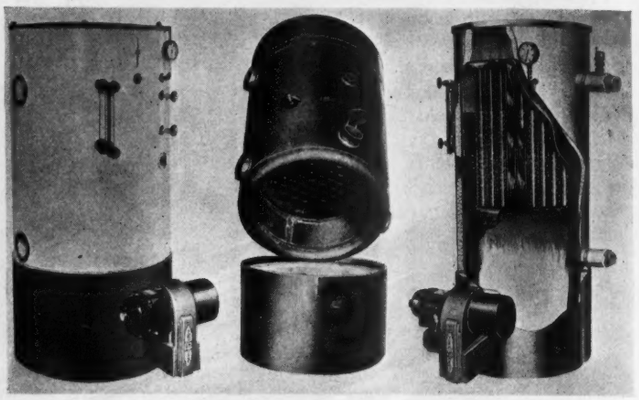
Builders of Fine Craft

LOS ANGELES HARBOR, TERMINAL ISLAND, CALIF.

equipped with air cleaner, gasoline filter, magneto, self starter, rope start, gas tank and remote stop control. For easy portability, the entire unit is mounted on a skid-type base, equipped with 5-inch wheels. When the unit is in use, the wheels are raised from the ground, thus preventing creeping. The unit is used also as a direct current lighting plant with output range from 1000 to 3000 watts as required. Hunter-Hartman Corp., St. Louis, Mo.

YORK-HEAT MARINE BOILER UNITS

▶ These seagoing heating plants are designed and built for heavy duty, predetermined seagoing heating requirements for low pressure hot water or steam systems on any type of boat having AC or DC electric generators.



Their specifications include charcoal iron tubes, special heavy steel spiral baffles, one piece combustion chamber and extra thick copper steel boilers. York Oil Burner Co., York, Pa.

NAVY NEEDS CHRONOMETERS

▶ A new appeal to yachtsmen is being made by the Navy Department, asking them to lend a hand in locating and sending to the Bureau of Ships, Washington, standard ship's chronometers needed for our growing fleet. The shortage is acute and the Navy is looking to yachtsmen to alleviate the condition. The Navy has been buying privately-owned standard chronometers and is still doing so, but the numbers obtained so far have been insufficient to meet requirements. The Navy will lease the instruments for the nominal fee of $1.00, for the duration, with a guarantee of payment in full to the owner should the instrument be lost or destroyed.

Only standard ship's chronometers with a detent escapement, fusee and chain attachment, with a movement whose diameter measures not less than 3" nor more than 3⅞", and with a running time no greater than 56 hours for one winding, are required. Nor does the Navy want chronometer watches.

The blank form below should be filled by chronometer owners willing to lease the instrument under the above conditions. On receipt of the information by the Bureau of Ships, shipping instructions will be forwarded to those whose instruments appear to meet the specifications. The shipping can be done at the Government's expense. Under no conditions, however, should chronometers be forwarded until requested by the Bureau.

After the instrument has been received, inspected and appraised, the owner will be notified of the appraised value and will be sent a voucher for $1.00 and a lease form to be filled out. If the appraised value is satisfactory to the owner and he completes and returns the lease, his chronometer will then be conditioned for service and sent to a vessel in the fleet. The instrument will be assigned a Navy serial number, of which the owner will be informed. The initial form to be filled follows:

Name ....
LAST FIRST MAKER

Address .....
NUMBER AND STREET

....
CITY AND STATE SERIAL NUMBER

It has detent escapement, fusee and chain .....

Diameter of movement .....

Maximum running time per winding .....

Shipment at Government expense is desired .....

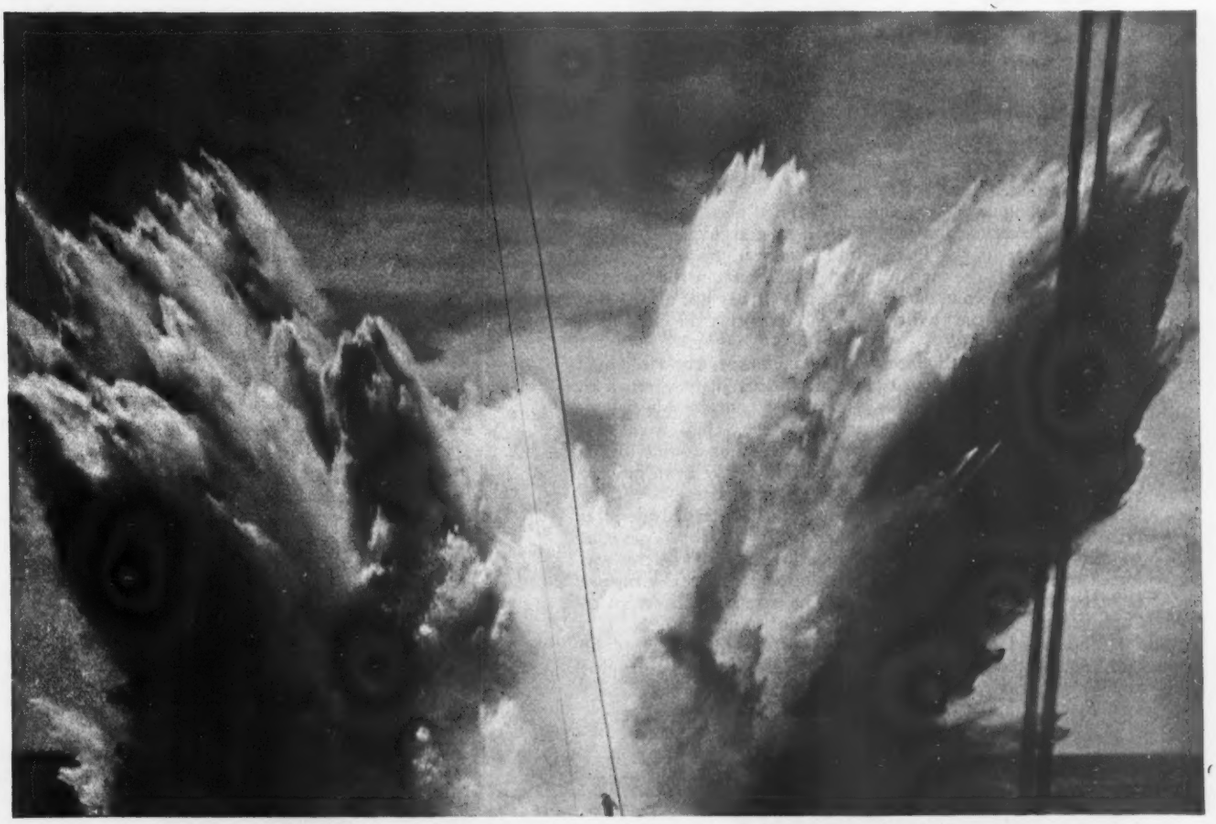
Remarks .....

Mail this form to U. S. Navy Department, Bureau of Ships, Attention: Code 875, Washington, D. C.

Vosper Motor Torpedo Boats are being delivered in constantly increasing numbers to our allies

ANNAPOLIS YACHT YARD employees are now proudly wearing the Army-Navy pin. The banner floats above the yard. Every one of us is now striving to uphold and better this record in construction of Vosper MTB's for our allies and 110-foot subchasers for the United States Navy.

When this wartime job is finished, we will be at your service—ready to build you the finest cruiser we have ever produced.



One of our submarine chasers delivering ash cans to the Axis

ANNAPOLIS YACHT YARD, INC., ANNAPOLIS, MD.

"I'LL TROUBLE YOU FOR THAT HAT"

IN all American Naval history, no ship has ever approached the place of affection and admiration that the *Constitution* has held for a century and a half. This grand old warrior served under many different commanders and fought through to many gallant victories, but none was more thrilling or had greater historical significance than the contest with the British *Guerriere*.

The English Captain, James R. Dacres and Captain Isaac Hull who commanded the *Constitution*, had been close personal friends in peacetime and held many heated arguments over the relative merits of the British and American Navies. As war clouds gathered, the two wagered a new hat on the outcome if they should meet in battle. Almost as if they had arranged it by appointment, the two came upon each other off Cape Race on August 19th, 1812.

The *Guerriere* opened fire at maximum range, but Hull held his fire until he had moved close abeam the British, much to the consternation of his crew who took a considerable pounding from the accurate fire of the *Guerriere*. They were well repaid for their patience however, for the first double-loaded broadside from the *Constitution* raked the enemy from bow to stern, causing terrific damage and terrible casualties.

Thereafter, Hull bore in mercilessly, pouring broadside after broadside into the staggering *Guerriere*. In the short space of 30 minutes the Britisher was a foundering hulk and Dacres was forced to strike his colors. As he came aboard the *Constitution* to make terms with the Americans, he extended his sword to Captain Hull in the traditional gesture of submission.

Hull stepped forward, but instead of taking the sword he said heartily: "I don't want your sword Dacres, but I'll trouble you for that hat!"

Today, Britain and America face common foes who are unworthy of the honor and sportsmanship of 1812, but who have and will receive the full force of our traditional fighting spirit. Hubbard's South Coast Co. is proud to be building warships that are helping to make this possible.

ARMY E NAVY

HUBBARD'S South Coast Co.

NEWPORT HARBOR, CALIFORNIA

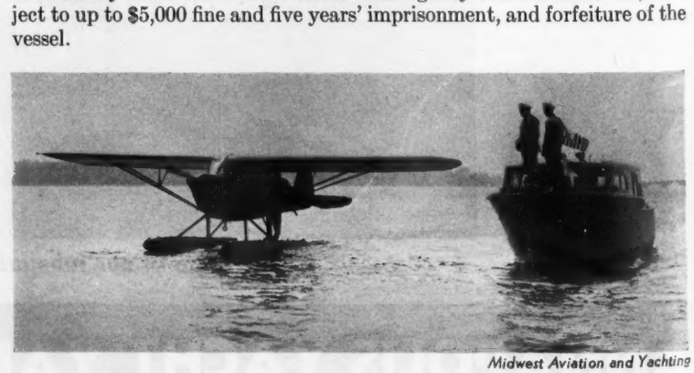
NEWS

▶ From the Third District comes word that they are losing a Director but that a Coast Guard fighting ship is getting a veteran skipper. The inimitable and ever efficient Lieutenant Commander P. D. ("Pete") Mills, who in the space of four years developed the local Auxiliary from a mere handful of members to a force of more than 6,000 men, has been given a sea assignment — and no less than the command of his own ship! He goes with the hearty good wishes of his countless friends who know how deeply the service is indebted to him for his great enthusiasm and outstanding leadership. Commodore R. E. Tyrrel, a well-known yachtsman and long a driving force in the District's activities, will take his place — which guarantees that there will be no slackening in activity. . . . Two former Navy men form what is probably the only crew of weather forecasters in the Auxiliary. Alan Dale and George Olsen, of Flotilla 1001, are setting up a modern forecasting bureau at a local base, but the results of their prognostications will not be available to anyone but Auxiliary officers. . . . No less than eleven members of Flotilla 506, Westchester Division, made volunteer blood donations during the recent Red Cross Drive.

▶ An intense membership drive, designed to swell the total enrollment of the Auxiliary in the Sixth District to about 1000 or more, is now being set up, according to Lieutenant Louis Hanson, USCGR, Director. In the drive for greater enrollment, the emphasis is being placed on regular as well as associate memberships. It is believed, the Director stated, that there are still dozens of boat owners within the confines of the district — which extends from North Carolina to Florida — who have not as yet had the opportunity to join up. In view of the fact that there can be as many associate members as regulars (but no more), emphasis will be placed on that classification.

▶ In view of the fact that many CGA members are not clear as to the Associate status, it might be well to commit to memory the following official definition: "Associate memberships may be granted to citizens of the United States who are potential crew members of vessels in a flotilla and who show the proper interest in Auxiliary instruction activities. Associate members shall have all the rights and privileges of regular members, with the following exceptions: (a) they shall not have the right to vote; (b) they may not hold office; and (c) the Auxiliary flags or pennants may not be flown on a vessel when only associate members are aboard. The applications for enrollment and all other records in connection with associate memberships shall be handled in the same manner as for regular memberships. The membership certificate and identification card issued associate members shall have the words *Associate Member* stamped prominently across the face thereof. The number of associate members in a flotilla shall not exceed the number of regular members of the flotilla."

▶ "Topside," the informative CGA journal of the Fourth Naval District, carries a pertinent warning regarding the matter of selling pleasure vessels to aliens, pointing out that such sales must first be approved by the Maritime Commission. The law applies equally to sales to friendly as to enemy aliens. Those who violate it are guilty of a misdemeanor, subject to up to $5,000 fine and five years' imprisonment, and forfeiture of the vessel.



Midwest Aviation and Yachting

An Auxiliary vessel and a plane of the CAP rendezvous during a patrol by members of a Detroit Flotilla

▶ "Where," asks the Ninth Naval District CGA officers in a message to their members, "does the Auxiliary stand in relation to Temporary Reserve activity?" This same question has puzzled not a few members in all parts of the country, and the reply as published in "Upstream," the District's news bulletin, warrants repeating: "This question has come up again and it should be clearly answered and understood. The Auxiliary is more important and more permanent today than at any time since its inception. If it were not for the Auxiliary, the enrolling of personnel in the Temporary Reserve would not be possible to the extent and with the ease with which this is being accomplished. The very name of Temporary Reserve indicates, thank goodness, that it is not the permanent program, whereas the Auxiliary is and will remain so for a long time to come. Temporary Reserve duty, while largely performed by Auxiliarists, is actually served under the authority and direction of the Regular Coast Guard Operation, usually under the Captain of the Port. Therefore the Temporary Reserve operations are not an Auxiliary activity. On the other hand, the Auxiliary serves as the recruiting agency and indoctrination agency for the procurement of this part-time personnel and this today is the number one activity of the Auxiliary.

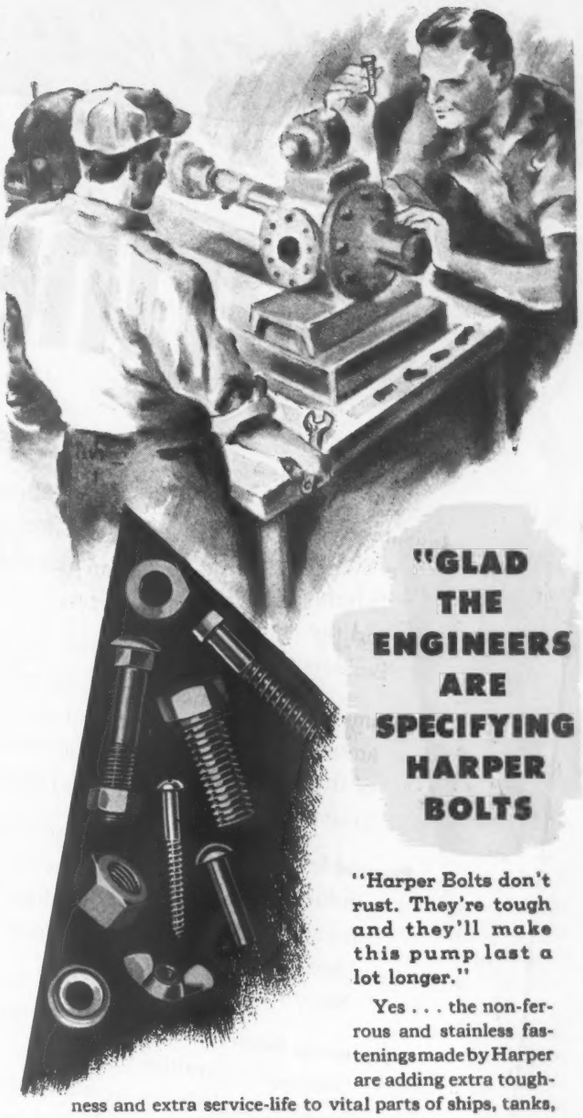
"There is no change whatsoever in the relation of Auxiliarists, who are now also Temporary Reservists, to their flotilla and its activities. For these men, the flotilla will continue being a voluntary, non-military association through which they may meet with other 'boatmen at heart' for the pleasure and benefits that this organization has always afforded. The normal functions of the Auxiliary and the procurement of personnel for the Temporary Reserve will serve as a relief to the Auxiliary member from the serious business of serving on part-time duty with the Regular Coast Guard Operation in the manner of the Officer's or Serviceman's Club."

The same publication also clarifies the status of the CGR (T) uniform, pointing out that enlisted men holding ratings under Chief Petty Officer will not be required to wear the traditional "bell bottom trousers." The present policy is to furnish the newly authorized surfmen's uniform, which has a dark blue, single breasted, four button coat similar to that of a Chief Petty Officer. The trousers are straight cut without cuffs. The cap is the visor type and the accessories are white shirt, black four-in-hand tie, and black plain toe shoes. The summer working uniform will be of the same design except for the material which will be khaki. The accessories will be khaki shirt, black tie, khaki cap cover and black shoes. . . . Most everyone is concerned about the "who salutes whom" problem between Coast Guardsmen and the Coast Guard Spars. In a word, the rule of military courtesy applies: rank takes precedence.

▶ There is always something new under the sun, and here is a nautical innovation by CBM Louis M. Johnson, Commander of the Sixth (New Orleans) Flotilla. Not only does Mr. Johnson write home frequently, but his letters always arrive promptly. It seems that the interfamily communication system hinges on his interest in carrier pigeons. In the years before the war, he used carrier pigeons to deliver messages from his New Orleans office to his over-the-lake home — in 19 minutes. Now that he is in the Auxiliary, he carries his fliers aboard, and with notable success. . . . Further news from the Eighth Naval District tells of a seagoing classroom for the enlisted personnel stationed at the Naval Air Training Base on Lake Pontchartrain which has been provided by CGA members. Under a training plan developed by Lieutenants T. F. Mathes and Irving F. Chase, approximately 20 sailors are taken out on CGA vessels six days a week and are given a varied program in deck seamanship and other basic nautical matters. . . . The New Orleans District can now boast of a total of six Flotillas.

▶ A new blinker pistol, available to CGA members, has just been announced by "The Norwester," official publication of the Thirteenth Naval District. The unit is made in both watertight and weatherproof models. It has proven effective as a shielded spotlight up to 200 yards, while as a blinker its visibility is 3 miles at night and 1.6 miles in daylight. Further particulars may be obtained from the Seattle Lighting Fixture Co., 222 2nd Ave., Seattle, Washington. . . . This same issue points out that Temporary Reservists are entitled to receive the benefits of the Federal Employee's Compensation Act for injuries suffered in the line of duty. However, the death and disability benefits provided by the Compensation Act are based upon the pay of the person involved and, since Temporary Reservists receive no pay whatsoever from the Coast Guard, there is no amount by which the death and disability benefits can be measured. It is reported that this matter is now under consideration by Headquarters.

▶ "The Whale Medal," honorary pat on the back given those members in the Eleventh Naval District who have made outstanding efforts in behalf of the CGA, has recently been awarded Gilbert Van Camp, who has organized the first Fishing Fleet Flotilla in the District.



"GLAD THE ENGINEERS ARE SPECIFYING HARPER BOLTS

"Harper Bolts don't rust. They're tough and they'll make this pump last a lot longer."

Yes . . . the non-ferrous and stainless fastenings made by Harper are adding extra toughness and extra service-life to vital parts of ships, tanks, jeeps, planes and other war equipment. Also in hundreds of war production jobs they are preventing failures of vital equipment and keeping production rolling. They have high tensile strength; they resist rust, corrosion, many acids and alkalies and other tough conditions.

4320 STOCK ITEMS . . . of bolts, nuts, screws, washers, rivets and accessories in the non-ferrous and stainless alloys.

WRITE FOR CATALOG . . . and reference book—80 pages—4 colors—193 illustrations—numerous tables and other data. Free when requested on a company letterhead.

THE H. M. HARPER COMPANY
2640 Fletcher Street, Chicago
EASTERN BRANCH: 45 West Broadway, New York City
Offices in principal cities

ARMY E NAVY
HARPER Chicago
EVERLASTING FASTENINGS

BRASS • BRONZE • COPPER • EVERDUR
MONEL • STAINLESS

Let's have a look at the

Marine Industry's

ASSETS

Inventory: This isn't written as an ordinary advertisement, but rather as a Report on a Stewardship . . . the Marine Industry's stewardship to the Boating Public. By "Marine Industry" we mean the old established boat yards, the engine builders and the associated manufacturers of marine equipment, as distinguished from the Builders of Big Ships . . . . . **CHARACTER**

Equipment: This pioneer American industry had one deep source of strength divided among widely distributed and diversified enterprises, each a specialist. The genius of this relatively small but potentially important industry rested with its executives, craftsmen and workmen who constituted a reservoir of "know how" . . . . . **EXPERIENCE**

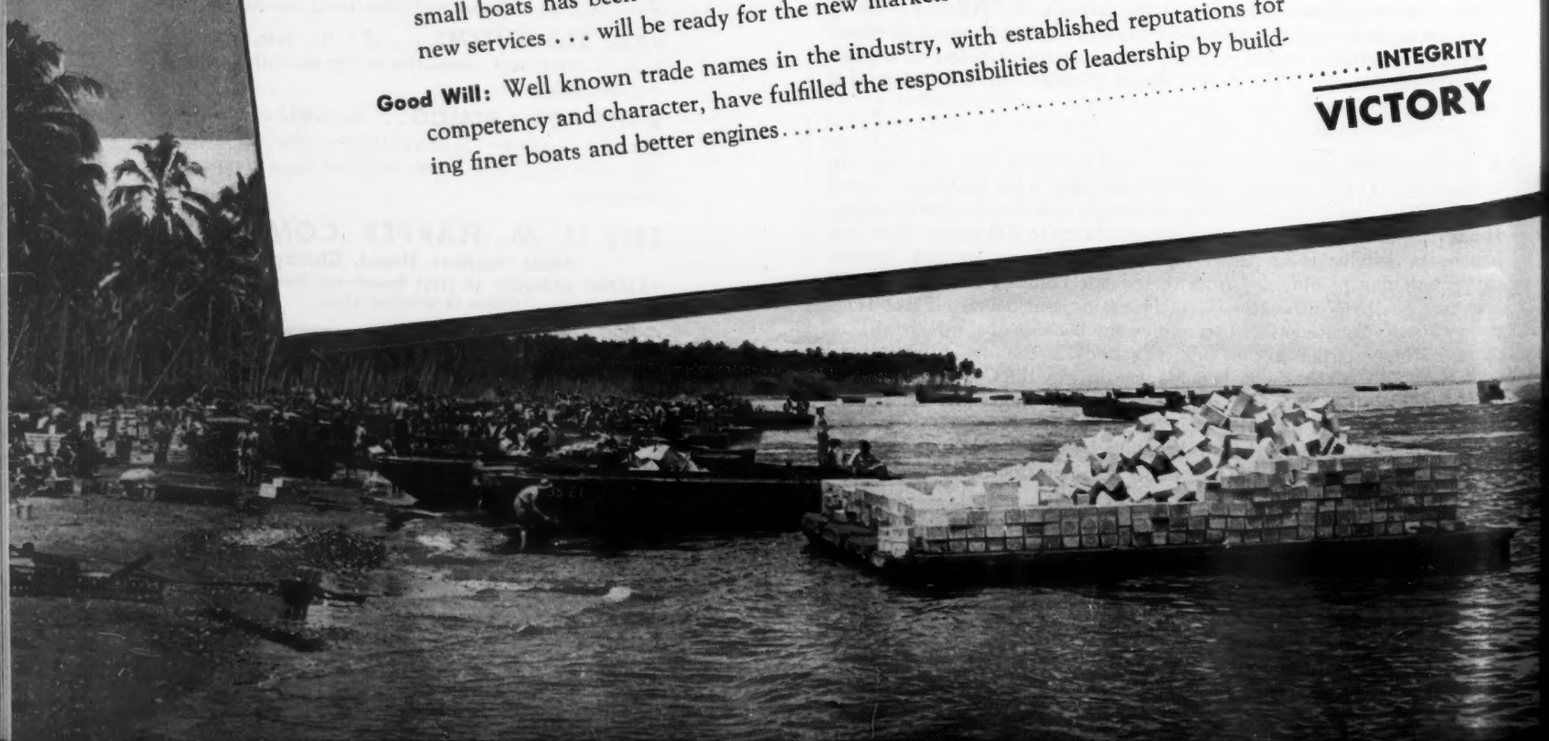
Prepaid Insurance: When the Japs struck at America on December 7, 1941, this vigorous industry was ready. In contrast to other industries, no "change over" was required for conversion to war production. Highly specialized boats and engines had already been developed and elimination tests completed through the forethought of the Navy's Bureau of Ships . . . . . **READINESS**

Accounts Receivable: The U. S. Navy needed boats and engines and equipment in fantastic quantities for bases in the U. S. A. and overseas. The time element was urgent. These boats were and are being delivered on schedule, a solid and satisfying achievement for this old and honored industry. This took . . . . . **COURAGE**

Accrued Markets: This is the first war in a hundred years in which the production of small boats has been of such importance. New plants, new facilities, new blood, new services . . . will be ready for the new markets after the war . . . . . **DETERMINATION**

Good Will: Well known trade names in the industry, with established reputations for competency and character, have fulfilled the responsibilities of leadership by building finer boats and better engines . . . . . **INTEGRITY**

VICTORY



Balance Sheet..

Awarded to Gray
December 24, 1942

LIABILITIES

Temporary Discontinuance of Pleasure Boat Use: This immediately became the Government's gain, as large numbers of good sea-going boats and trained reservists among their owners hurried into emergency service to meet the needs of the hour. Manufacturing facilities were completely released for war production..... **YOUR PRUDENCE**

Debt to Commercial Boat Owners: This is indeed a debt to be paid, a preferred claim. The owners of commercial vessels have cooperated by sacrificing their own wants and needs to give the Government first choice on new equipment. Meanwhile, their own equipment is working overtime and wearing out..... **YOUR SACRIFICES**

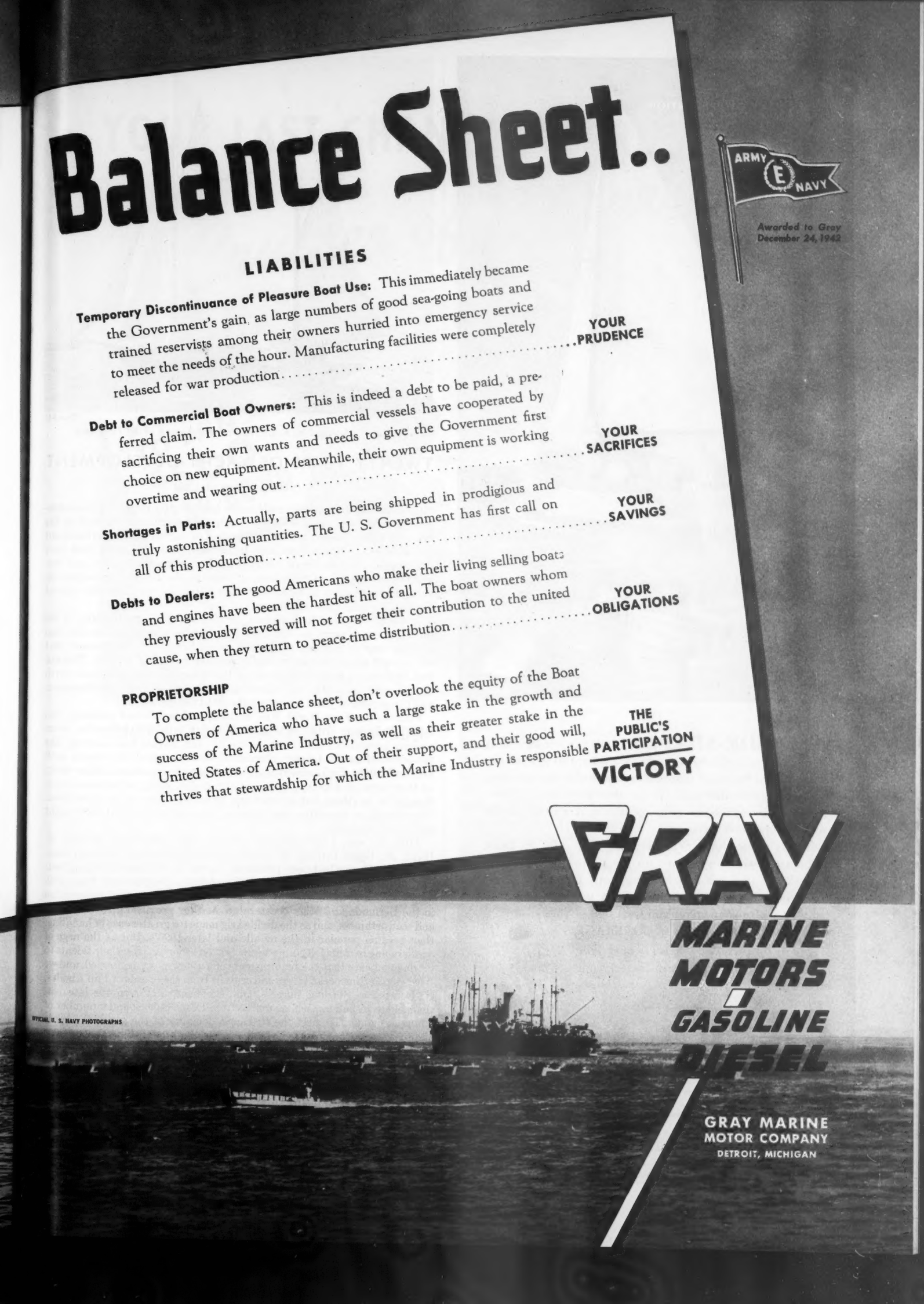
Shortages in Parts: Actually, parts are being shipped in prodigious and truly astonishing quantities. The U. S. Government has first call on all of this production..... **YOUR SAVINGS**

Debts to Dealers: The good Americans who make their living selling boats and engines have been the hardest hit of all. The boat owners whom they previously served will not forget their contribution to the united cause, when they return to peace-time distribution..... **YOUR OBLIGATIONS**

PROPRIETORSHIP

To complete the balance sheet, don't overlook the equity of the Boat Owners of America who have such a large stake in the growth and success of the Marine Industry, as well as their greater stake in the United States of America. Out of their support, and their good will, thrives that stewardship for which the Marine Industry is responsible **THE PUBLIC'S PARTICIPATION**

VICTORY



OFFICIAL U. S. NAVY PHOTOGRAPHS

GRAY

MARINE MOTORS

GASOLINE

DIESEL

GRAY MARINE
MOTOR COMPANY
DETROIT, MICHIGAN

ALL SHIP-SHAPE? Don't run needless risks. Replacements and labor for repairs are hard to get and the Coast Guard has other more important duties than assisting pleasure parties this year. To be absolutely sure of your craft's seaworthiness, ask your agent or broker to obtain the advice of a Chubb surveyor.

In this connection write today for "The ABC of Yacht Insurance," with suggestions on the proper care of your boat. You'll find this booklet interesting, different and informative. There's still another form of protection that picks up where your precaution leaves off—
ADEQUATE INSURANCE COVERAGE

And by the way, don't forget to have your identification papers in order for everyone on board *before you sail. That's really important this year!*

CHUBB & SON

Managers of Federal Insurance Company and Associated Companies

UNDERWRITERS OF ALL FORMS OF MARINE • FIRE • AUTOMOBILE • INLAND • AVIATION • PERSONAL EFFECTS FLOATERS • REGISTERED MAIL • AND COVERAGE FOR FINANCIAL INSTITUTIONS

90 JOHN STREET NEW YORK

Represented by Agents and Brokers throughout the Country

Rosenfeld

"Micco," designed by Ralph Munroe, was second in the 1924 race

TWENTY YEARS OF YACHT DEVELOPMENT

(Continued from page 37)

into being was to be largely responsible for the utter neglect of the established racing rule classes, except in a few of the smaller sizes, such as the Six- and Eight-Metre yachts. In the place of narrow, sharp, out-and-out racing types, designers were soon to be busy producing boats that were practically as fast under all 'round conditions, were comfortable, and seaworthy enough to go anywhere, as witness the several trans-Atlantic races that have been sailed in boats under 70 feet over all length without the loss of a single boat from stress of weather.

It seems worth while, therefore, on this twentieth anniversary of the revival of ocean racing to look back and refresh our memories on the kind of boats that we formerly sailed, and review briefly the development that has brought about the present highly popular and efficient yacht. This can best be done, perhaps, in pictures, on the theory that one picture is worth 10,000 words, so in this, and following articles we will trace the changes in and the growth of yachting during the last twenty years.

Prior to the First World War, cruising yachts followed generally two types. They were either of a modified racing type with somewhat more cruising accommodations, such as the 25- and 30-foot knockabouts, like those turned out by Lawley, Herreshoff, Crowninshield, and others, with long ends, light displacement and but little room or comfort below deck; or they were of a heavy, wide, chunky model, designed without much thought to anything but comfort and requiring a big rig to drive them. They would, as was often said of them, never drown you but they might starve you to death.

After the war, a few designers, such as John Alden and William H. Hand, Jr., began turning out small schooners, following fisherman lines, such as McManus had been producing for the New England fishing fleet. As subsequently developed, these boats became progressively finer, with longer ends and more efficient rigs, largely under the urge of competition in the Bermuda and other ocean races. As they provided greater comfort and seaworthiness, and as the divided rig made for greater ease of handling, they became popular in the middle and later 1920's. But as the urge of ocean racing became felt, other designers were soon turning their talents to producing boats that the requirements of the new sport demanded, and we were soon getting ocean racers and cruisers from the boards of Phil Rhodes, C. D. Mower, Starling Burgess, Olin Stephens, and even the late Nathanael Herreshoff himself, as well as from Edson Schock and a number of young designers. To meet the strenuous demands of the game, the boats had to be good, they had to be fast, and they had to be able to house their crews in comfort.

That first Bermuda fleet saw eight designers represented with yachts. They were: Hand (6 boats), Alden (4), Crowninshield (3), Herreshoff (2), Fred Lawley (2), McManus (1), Charles Morse (1). The designers of two of the boats were unknown. The race itself was a hard one, with heavy winds and high seas for the first three days, and on the whole favored the smaller vessels. The Alden schooner *Malabar IV* won the over all prize, which boosted schooner stock, while *Memory*, a Herreshoff 40-footer converted to yawl rig, won in her class. The following year *Memory* took

YOUR LAST CHANCE TO DREAM UP THE "Cruiser of Tomorrow"

CONTEST CLOSES MIDNIGHT JUNE 30th

★ Although over 500 yachtsmen and boating enthusiasts have already entered the Richardson "Cruiser of Tomorrow" Contest, we still want your ideas. There is sufficient time to put your thoughts on paper and get them to the judges before the contest closes on June 30. Remember, the idea is what will count. You don't have to be an expert to compete, nor do you have to submit elaborate drawings or descriptions of your suggestion. You do, however, have to mail us the coupon below for your official contest entry blank and rules.

All prizes are in War Bonds. First, $500; Second, $300; Third, $200—and 25 Honorable Mention prizes of a $25 War Bond each. The contest rules are simple; any practical design suggestion and/or worthwhile improvement for a standardized motor cruiser (up to 34') may win. Of course, no pleasure cruisers are being built by Richardson today. Nor, has Richardson built anything but fighting craft since before Pearl Harbor. On the other hand, the rich experience gained in producing at top speed for the Army, Navy and Coast Guard has given us knowledge which will show up to great advantage when we begin—after Victory—to build the "Cruiser of Tomorrow". Mail coupon to Richardson "Cruiser of Tomorrow" Contest, 296 Delaware Ave., Buffalo, N. Y.

CONTEST OPEN TO ALL!*
Amateur and Professional Alike!

1st PRIZE $500 WAR BOND
2nd Prize $300 War Bond
3rd Prize $100 War Bond

In case of a tie, duplicate prizes will be awarded

25 Honorable Mention prizes of a $25 War Bond, for the next best 25 ideas.

CLOSES MIDNIGHT JUNE 30th, 1943.

** Except Richardson's employees and adv. agency.*

RICHARDSON
CRUISERS *for Peace time*
FIGHTING CRAFT *for War*

MAIL COUPON FOR ENTRY BLANK

Richardson "Cruiser of Tomorrow" Contest
296 Delaware Ave., Buffalo, N. Y.
Please send Contest Entry Blank.

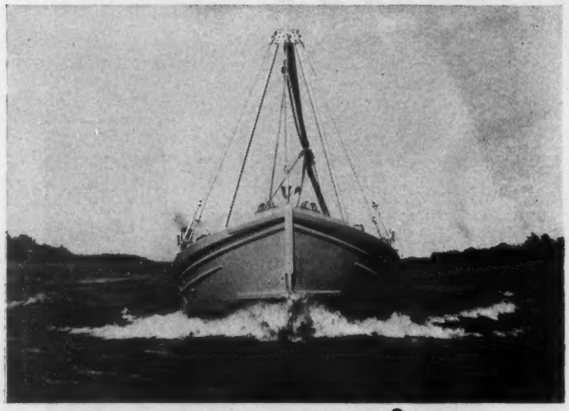
NAME

ADDRESS

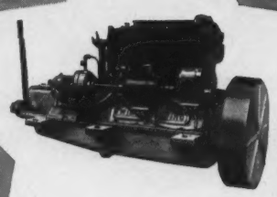
CITY STATE 19

Detroit Public Library

POWER
for Buoy Boats of the
U.S. NAVY



Red Wing



Marine
ENGINES

• Mine fields, channels, etc. must be carefully marked. And the Navy's 38′ Buoy Boats are doing those duties for which they are specifically designed. Many of them have Model B Red Wing Engines — 32 to 40 hp., 4-cyl., 4½″ bore x 5″ stroke, 318 cu. in. displ. Stamina was a basic principle of this engine's original design. 25 years' experience in building engines for pleasure cruisers and commercial boats of many types have *proved* that stamina and *improved* the sea-going dependability of present design. Full power capacity, speed and smoothness give it preference for wartime uses. After the war the Red Wing "B" will be even better — ready for your every use.

ENGINES AVAILABLE FOR ESSENTIAL USE

20 Gasoline Models, 8 hp. to 125 hp.
Spark Diesel Types, 42 hp. to 200 hp.

Get the Latest Red Wing Catalog

DISTRIBUTORS:

Verrier, Eddy, 201 E. 12th St., New York City
W. H. Moreton Corp., 1042 Commonwealth Ave., Boston
Gochenaur Marine, 437 Arch St., Philadelphia

RED WING *Marine* ENGINES
RED WING MOTOR CO. RED WING, MINN.

Levick

"Sea Call," third in Class A in the 1923 race, took the cup for a boat with an all-amateur crew. She was designed by W. H. Hand, Jr.

the big prize for all boats together, the other class winners being the yawl *Hutoka* and the schooner *Lloyd W. Berry*.

In those early races, there was no measurement rule, as such. With a mixed fleet, over all length was the sole basis of measurement and rating. A steel tape was run over the boat from stemhead to taffrail, and the resulting figure was the boat's rating. Time allowance was arbitrary, based on a fixed number of seconds per mile that had worked satisfactorily in other races. All most unscientific, but most satisfactory, as it turned out, and the results were close, only a spread of one and a half hours between the first four and some seven hours separating the first seven yachts on corrected time. In one case, a spread of only 52 seconds covered the actual finish of three boats of the same approximate length but different types. Later, when owners began building with an eye to winning the race, measurement rules were adopted, and altered as experience showed to be necessary, until, after much sweat, tears and travail, the present rule was adopted.

But that is getting ahead of our story. We are only at the beginning now and will take up the development under the rules in later chapters.

(To be continued)

THESE PERENNIAL PC'S

(Continued from page 35)

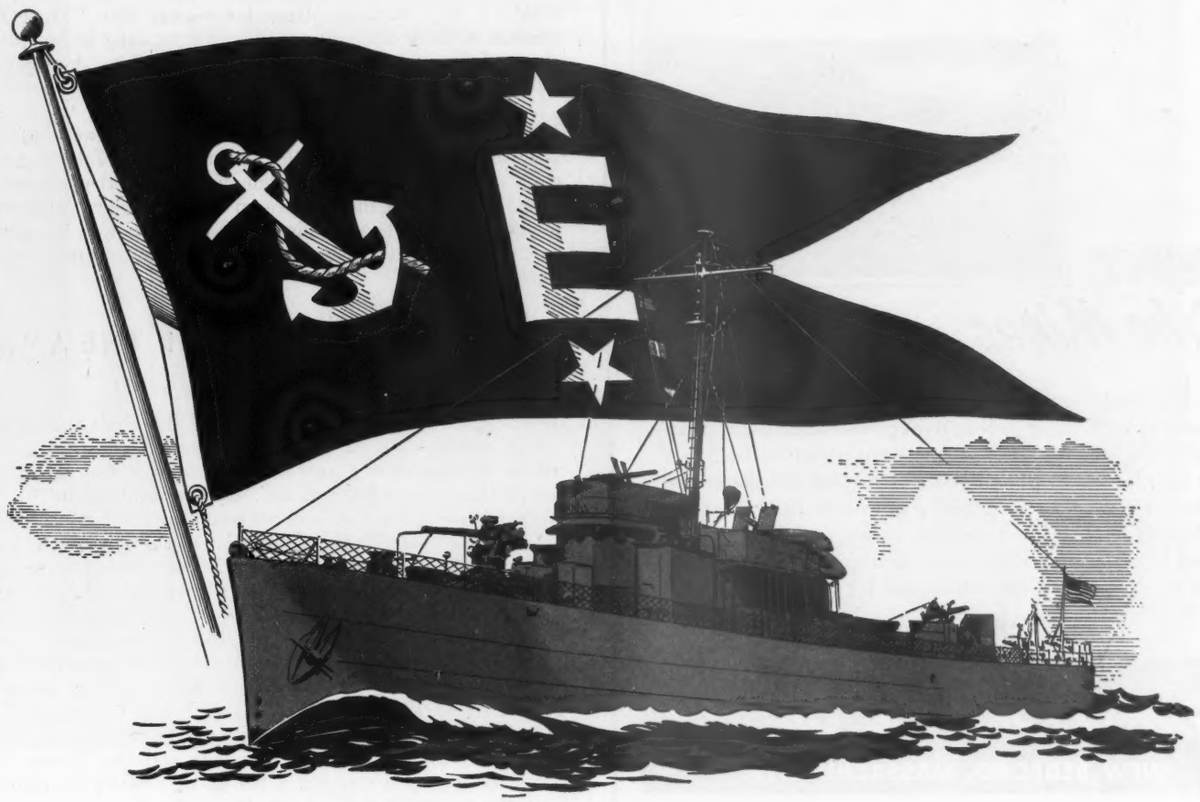
"investigating committee," and voted in by all owners. Even so, only two changes that pertain to speed have been inaugurated to date.

Until two years ago, the PC's were a spirited group racing off San Diego, Newport, San Francisco and Pearl Harbor. But no one has the last word, even in yacht design, and a new boat came along to seek the throne. She was the Rhodes sloop. Two feet longer, beamier and with more freeboard, she seemingly summed up the advantages of the PC's and offered improvements. She contained soft bunks, had more headroom, complete galley, a head, and an outboard well. Also, she was built in the great democratic tradition and within grasp of moderate pocketbooks. The PC owners viewed the new craft with mingled feelings — one of which, it is suspected, was envy. There was but one honorable thing to do. The PC's did it. They promptly challenged the Rhodes to a dual race meet.

Unfortunately, the Rhodes owners accepted. If they hadn't, the PC owners might have gone on rationalizing, certain that they had a faster craft, anyway. But the two classes are so evenly matched that the question is still being argued, both in and out of the water.

The eventual outcome, of course, was the new cruising PC — complete with doghouse, galley, head and comfortable bunks. The new model has an outboard well that is fitted with a screw-clamped wooden plug which is watertight and almost seamless for racing. Most of the PC's now have this auxiliary and four of them have been converted to cruising racers after unanimous acceptance of the project. Much to the surprise of all concerned, the four new boats — 500 pounds heavier, and with more wind resistance — are just as fast as the others. The coast championship has already been won by a "convert."

Twelve years' experiment in democracy may or may not have proved anything, but the PC owners think it has.



BUILDING FOR A LASTING PEACE

In April, the men and women of Consolidated received their third successive Navy "E" Production Award. This was an unusual honor. It was the first time that the second star had been awarded for outstanding shipbuilding achievement anywhere in the Third Naval District.

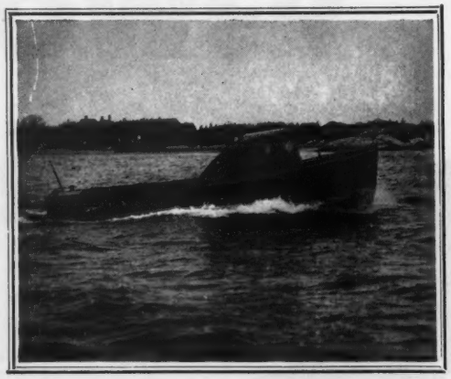
Proud as we are of this recognition, we are prouder still of every man and woman in Consolidated. It has been their earnest, their whole-hearted effort in our Navy's shipbuilding program, that has earned these awards. They pledge to continue this effort; they pledge to give every ounce of energy to the job of building fighting ships to win a lasting peace.

W. A. Wood — President

CONSOLIDATED
SHIPBUILDING CORPORATION
MORRIS HEIGHTS, NEW YORK

SHIPBUILDERS SINCE 1885 . . . DURING WAR, COMBAT AND AUXILIARY VESSELS FOR THE U. S. NAVY AND U. S. ARMY ENGINEERS . . DURING PEACE, COMMERCIAL AND FINE PLEASURE CRAFT

★ ★ ★ ★



Keeper of the Mines

IF a mine must be repaired or replaced it is the job of the mine yawl to make its way through the mined area to accomplish the job. We don't wish to brag about the boats we have built for this purpose, but about the men who undertake the task. No glamour or publicity goes with it, yet this job requires as much skill and courage as any in the war today. Palmer Scott & Company is proud to build the boats for the brave Army men who are responsible for the upkeep of the mine fields.

Palmer Scott & Co., Inc.
NEW BEDFORD, MASSACHUSETTS

"When the paint is made by Smith— the finish is never in doubt!" —says Old Cap' Smith

Gallon after gallon X thousands in many different types of special marine finishes for war craft have been made by Ed. Smith & Co. since Pearl Harbor—with unvarying quality and strict adherence to government specifications.

Ship builders, like yachtsmen who use Smith's Cup Defender Finishes, have come to know there's no doubt about the finish when the paint is made by Smith!

E.S. 1827 & Co.
EDWARD SMITH & CO., INC.
Marine Finishes Exclusively
11 East 36th Street, New York, N. Y.

UNDER THE LEE OF THE LONGBOAT

(Continued from page 36)

when she has removed four petticoats, bodice, and whatnot, and is clad only in a thin revealing dress is not what cools my ardor for her. I use her creator's very words to damn her — page 220: "Minga, stony faced because of those despairing cries which yet rang in her ears, sought the shade of the main sheet." . . . Nope. Us old sea dogs likes 'em a little plumper.

Some of the boys in the miners' union (mine sweeping division) have been thinking less about Hitler and more about John L. Lewis, who has come closer to treason and gotten away with it than any unioneer of our time. We don't ask that he give up some of his own comforts for the coal miners that have boosted him to his unholy power. We merely ask that he come out some day and when we're at general quarters test a depth charge for us.

YACHT DESIGNING FOR THE AMATEUR

(Continued from page 47)

have a minus sign. This means that the CB is abaft Station 5. Divide this sum of moments by the sum of the Functions of Areas and the quotient will be the number of spaces the CB is from Station 5, — .346. Multiply this by the common interval, 2.2′, and the result will be .76′, the distance of the CB abaft No. 5 or 53.5 per cent of the water line length.

To show graphically the distribution of the under water volume of the boat, we plot a Curve of Areas. Set off at each station the area of the under water section at that station, to any convenient scale, and draw a smooth curve through the spots thus laid down. The area under this curve represents the volume of the underbody and you could get the displacement by running the planimeter around this curve of areas. And we can compare the curve with some theoretical curve and see where they differ. There are several theoretical curves of areas in common use, perhaps the most common one is the versed sine-trochoid found in most books on naval architecture. This has rather fine ends and the "Crane Theoretical," which has the ends snubbed a bit, gives a better distribution of bulk. With the water line divided into ten parts, the ordinates for this are as follows: 1, .107; 2, .341; 3, .629; 4, .870; 5, .992; 6, .974; 7, .822; 8, .527; 9, .216; 0 and 10 are 0. This gives a good distribution of the boat's volume and a prismatic coefficient of .55. The CB is 52.77 per cent of the water line length from Station 0.

There is not, as many considered when the versed sine-trochoid and other "wave line" curves of areas were proposed, any particular virtue in the curve itself. But there have been a great many successful boats which have similar curves of areas and, whether or not they were designed to fit any such curve, you will find that most good boats have their displacement distributed in accordance with the dictates of the curve. And boats of different types, too. The curve does not necessarily make a good boat, but a good boat will have a good curve.

The relation of the area of the midship section to its surrounding rectangle is called the Midship Section Coefficient. The relation of the volume of displacement to the surrounding rectangular block is called the Block Coefficient. It is not of much value with a yacht form. A truer picture of the distribution of a boat's displacement is given by the Prismatic Coefficient, which shows the relation between the underbody and the volume of a cylinder touching the midship section and the same length as the water line. To get it, divide the displacement in cubic feet by the product of the midship section area and the water line length. For a sailing yacht or an auxiliary, it will not be far from .55; it may be higher for a work boat or a motor boat. The clipper ships ran from .60 to .63, and they had fine ends. Motor boats may go as high as .67 and steamships even higher.

As for the total amount of displacement, Fig. 34 gives good, average values for yachts of different lengths from 17 to 37′ water line. Different boats may fall above or below the line, depending on type and ruggedness of construction, but the averages on the graph will be found to give a pretty good idea as to the amount of displacement required. Remember that these are merely averages.

The solid line shows the recommended displacement for cruisers given in Skene's Elements of Yacht Design. The dotted line is one gotten out by H. C. Wintringham some fifty years ago. The dot and dash line gives the normal displacement required by the Universal Rule. I have spotted a few boats on the curve. Those above it are mostly heavy cruisers. But notice the spot marked A, which is a small sloop built of aluminum alloy. B is a boat built largely of waterproof plywood and of extremely light construction. C is an old-time auxiliary, of light draft and light scantlings and with little cruising gear while D is a small, narrow, experimental boat built almost altogether of plywood.

Therefore any such graph must be used with caution. A light, unbal-

Sign language for a naval victory

WITHIN THIS TEST ROOM, a sea fight with Axis war vessels is being weighted heavily in favor of one of the Navy's slashing motor torpedo boats.

Taking place here is an important reason why these PT boats have already sunk *over 250,000 tons of Jap war vessels!*

This giant 12-cylinder Packard marine engine is just completing a brutal workout—its "green run" as the engineers call it. For 8 long hours, each cylinder has been pouring out as much power as the entire motor in your Packard car.

Suddenly, the chief test engineer throws a switch. He checks his gauges and instruments, then motions to the crew in the test room. "Test run O.K. —take it away for tear-down!"

Now the huge engine will be completely taken apart. Each part will be painstakingly checked and tested to make sure it withstood its gruelling punishment. Then it will be re-assembled and test-run again for 4 hours, in accordance with exacting Navy specifications.

Perhaps you think this is carrying perfection to the *nth* degree. And you're right. But that's the way Packard builds engines.

It's also the way Packard builds Rolls-Royce aircraft engines for U. S. Warhawks. And for British Hurricanes, Lancasters and Mosquitoes that have bombed, strafed and blasted Nazis from Africa to Hitler's doors in Berlin.

Today's hair-splitting standards of precision manufacture will enable Packard to pass on new benefits to you after the war. This added experience, and the training of a superbly skilled supervisory staff and thousands of precision-minded workmen, will be your assurance of a still finer post-war Packard car.

Ask The Man Who Owns One

OFFICIAL U.S. NAVY PHOTOGRAPH OF ELCO PT BOATS

. . . to make your car last longer

Your Packard Dealer has an ample supply of spare parts, and skilled mechanics who proudly wear the ODT badge. Drive in for a complete "Car Health Plan" check.

If you need a *new* car, and can qualify, brand-new '42 Packard Clippers are still available—also fine low-mileage *used* cars on which there are no sales restrictions.

PACKARD

Precision-Built Power

ABANDON SHIP!
Our Navy, Army and fighting Marines ride the high seas under the dependable protection of Ta-pat-co Life-save equipment.
If you have missed finding your favorite Ta-pat-co Life-save vest at your marine or sporting goods store, have the satisfaction of knowing it has gone to help save lives on the battle front. It is giving our sea-borne fighting men the protection and comforting feeling of safety against the possible command—"Abandon ship!"
Keep in touch with your dealer. He will know when Ta-pat-co Life-save vests, Boat Cushions and other equipment will again be available for your safety and enjoyment of water sports.
1—SM—2
Ta•pat•co
OUTDOOR SPORTS EQUIPMENT
FIGHTING
AMERICAN PAD AND TEXTILE CO.
GREENFIELD, OHIO

lasted centerboard boat will naturally have less displacement than a husky cruiser with a lot of draft and a chunk of ballast on her keel. There is nothing about the graph which assures that a boat designed from it will have the optimum qualities; it merely shows averages and a boat designed from it will not be far out of line. The professional designer works from one boat to the next and has a mass of data to which he can refer; the amateur, however, must assign his displacement without such aid and the graph will help him to get the correct amount.

(*To be continued*)

RUNNING A YACHT CLUB IN WARTIME

(Continued from page 21)

Ours has seemed too small a club to have a formal junior auxiliary division. In its place, we carry the juniors with us aboard our boats. With a baptism of spray, they feel the thrills of fast starts, split tacks, buoy room and nerve shattering bow-to-bow finishes. Together and on an equal plane with their elders, they enjoy the flush of victory and learn the nobility of defeat.

Our club is wide open to juniors, with every member a committee of one to instruct them in seamanship and the sportsmanship found in sailing. The classrooms are mainly on the decks and in the cockpits of our boats, where all age and social barriers vanish, where the junior is treated as a full-fledged member and responds accordingly.

A club member's son is automatically one of us. Any other youth, under twenty-one and not gainfully employed, may apply for a Junior Membership at a cost of five dollars per year.

One of our most interesting features is the way everyone pitches in to do his or her share of the work. When we enlarge our dock, the majority of the membership does all the work. When we paint the outside of the building, almost everyone takes to ladders and wields a brush. We do practically all of our labor ourselves and supply as much of our own material as we can at cost price. Not only do we realize that this keeps the membership fee at a nominal figure but, after having labored, we also feel that we have a greater personal share in our club. The cycle is further completed by the fact that our labor gives us extra reasons for having to be at the club, and it attracts a substantial gallery, thus creating more activity and more fun.

In this coming war summer, with its serious complications, we look forward to our yacht club as the one bright spot. War production nerves will be soothed by constant activity and healthful exercise.

Our actual plans are being made flexible so that they can be expanded or contracted in accordance with wartime restrictions. Although we are faced with longer working hours, rationed food and rationed gasoline, we take comfort in the knowledge that there can be no restrictions on wind and weather.

Accordingly, we have established our racing schedules much the same as in years past. In fact, our active Snipe fleet has gone one step farther and set up an experimental twilight series of Wednesday evening races to be sailed over a short course. Our Lightning and Class E Scow fleets are watching with interest and may follow the lead.

Our power boat owners are hopefully waiting for word as to fuel. If too hard hit, they will find berths aboard our sail boats.

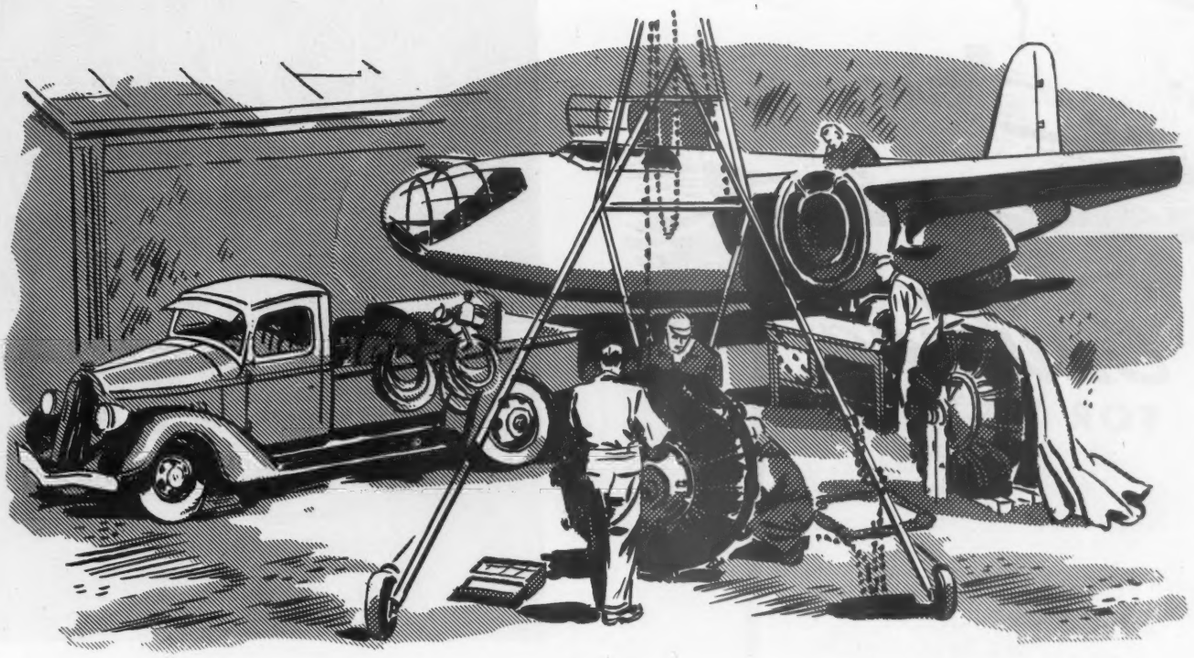
Most fortunately, an interurban bus line maintains a regular schedule past our clubhouse. We expect to use it extensively this summer. We plan to share rides as far as possible with our meager pleasuring driving allotments. All signs seem to indicate that our members will not shuttle back and forth as they did in previous years. We expect that, on each visit, they will make a day of it. Particularly, we anticipate that more people will stay longer over Saturdays and especially Sundays.

This will place a strain on our steward with a ration-restricted larder. It foretells the doom of elaborate steak dinners, roasts and other delicious foods. On analysis, however, we can place the emphasis on fresh vegetables and non-rationed items, filling in with whatever meat we can secure. It may be that we shall have to levy a voluntary assessment of a fraction of a pound of coffee or butter or sugar on our members, asking them to donate some of what they would use if they ate at home. Also, we are looking forward to easing the food problem by carrying our own picnic lunches on occasions.

Actually, the more we analyze the problems before us, the more simple the answers become. It looks as if we were headed for a summer of more simple, wholesome and communal living. Those prospects are definitely attractive.

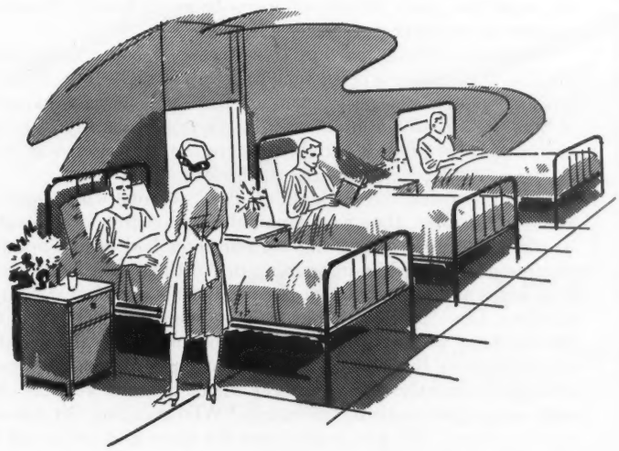
Because we are organized basically as a yacht club, with clear-cut by-laws and officers fitted for their duties, we are optimistic over our possibility of survival and our ability to keep an active yacht club flourishing.

When our fighting members come home on brief furloughs, we know that they will be pleased that all is not asleep at home and that their yacht club, at least, can afford them that interlude of pleasure for which they have been yearning these many months.



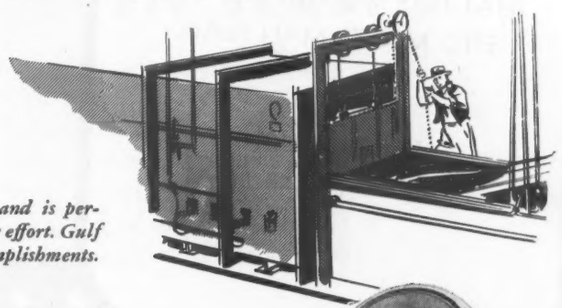
LUBRICATION IS ONLY A PART OF PETROLEUM'S JOB

IN THE FIELD as in the factory numerous new and replacement parts of all mechanized equipment must be "ground in" with exacting care. Aiding in this all-important work are various light lubricating oils which act as carriers for the many abrasives used.



AID FOR THE SICK and wounded—salves and light mineral oils of many types help speed the recovery of our sick and wounded. These, together with ingredients of soaps and toilet preparations, are contributions of the oil companies toward a healthier Army.

FAR BEHIND THE LINES production workers in our iron and steel plants produce the metal so frequently referred to as "the backbone of our war effort." Aiding in this effort are numerous oil products including miscellaneous oils and greases, coal spray oils, wire rope lubricants, quenching oils and rust preventives.



★ *The American petroleum industry has undertaken—and is performing—huge tasks of immense importance to our war effort. Gulf takes deep pride in its privilege of serving in these accomplishments.*

GULF OIL CORPORATION
GULF REFINING COMPANY

★ ***Victories Are Costly, Too—Buy War Bonds*** ★

Building
FOR VICTORY

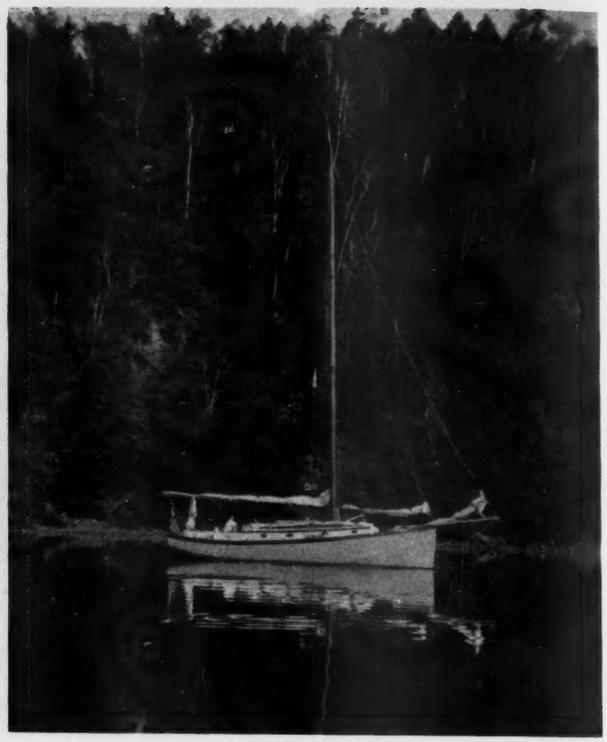
THE PEOPLE OF THE PEYTON COMPANY ARE BUSY TURNING OUT DEADLY SUBCHASERS TO HELP RID THE SEAS OF THE AXIS MONSTERS.

KEEP THE SIGHTS ON 'EM
BUY WAR BONDS

AS AMERICANS WE ARE BUYING WAR BONDS AT A RATE THAT HAS WON US THE COVETED MINUTE MAN FLAG.

LET US DESIGN
YOUR POST WAR BOAT

THE Peyton Company
BOAT BUILDERS
901 COAST HIGHWAY • NEWPORT BEACH
TELEPHONE NEWPORT BEACH 2088



A yachting background is most helpful to a budding WAVE. Here's "Roarin' Bessie" in the St. John River, New Brunswick

"WE JOINED THE NAVY . . ."

(Continued from page 29)

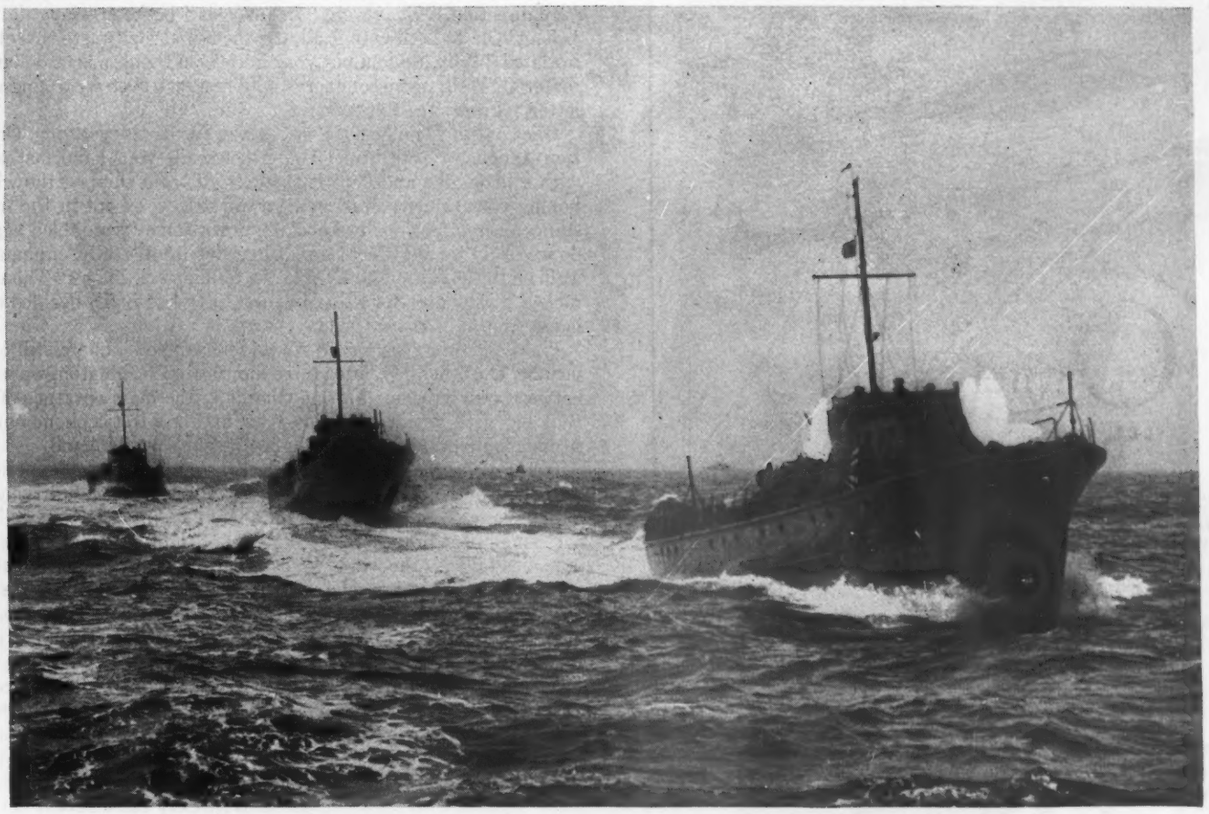
timidly after a moment of strained silence, "I can't." The Navy, as most people know, will not take "no" for an answer, but just as there was to be a violent apoplectic explosion, the girl lifted her skirt above the knee to prove her point. She was hopelessly knock-kneed. There was a faint sputter as the inspecting party left in haste.

The most difficult part in the process of being transformed from a civilian to an officer is in learning to keep a straight face. When five clowns with whom you happen to room are lined up solemnly facing each other, it becomes almost too much to ask. We tried valiantly to avoid catching each others' eye but, invariably, before the inspection was over, we'd all be red in the face with a suppressed mirth.

In our cruising days, Captains were not overwhelmingly impressive people. Of course, they were nominally responsible for the cutter or yawl in which we were sailing but we ourselves had been Captains too. We became adjusted while in training in Northampton to be ordered about by ensigns and j.g's., but real Navy Captains were few and far between in our lives. One day, early in our training, while being Officer of the Day for the first time, we had to answer the telephone. We became slightly flustered at taking down the message from an obviously impressive sounding voice, struggled valiantly with the Navy lingo, thought we were doing pretty well, when, alas, came our downfall. "Who is calling, Sir, please?" "Captain ————." We just couldn't get the name and had to ask three times while a patient voice repeated it over and over: "Captain ————." In the end, we had only untangled "————ood." In the back of our mind was still the "Captain" of our cruising days; it couldn't be an important Navy person after all, so we called out to the assembled WAVES: "Who is a Captain around here whose name ends in OOD?" Gales of laughter from our fellow officers; there was only one Captain in Northampton, Captain Underwood, the Commanding Officer of all WAVE officers in training!

Nobody wanted to come to Washington. We had read *Life*, heard hundreds of stories about existence in the capital of the U.S.A.; standing in line for hours to try to get something to eat; standing always in busses when you were lucky enough to get aboard one; nowhere to live; getting up in the dark and going home in the dark at night. Well, we both ended up there, one of us in the Bureau of Yards and Docks and the other in the Bureau of Ships — nice salt water sounding names! The first thing we learned in our offices was: stick to your desk, keep the shine on your skirt, and *use the telephone!* — we, who had never walked as much in our lives as during our officers' training.

The big hurdle was to establish ourselves on the telephone. To our listeners, were we an officer or were we an officer's secretary? There would be an audible gasp at the other end of the wire, "Who?" "Lt. Porter,"



HALL-SCOTT IN SERVICE

HALL-SCOTT
THE HALL-MARK OF QUALITY

ACROSS THE SEVEN SEAS!

From Bremerton to Auckland...from Guadalcanal to Tripoli...Hall-Scott INVADER and DEFENDER engines are setting new service records in fast military craft. In addition to powering these British "pocket destroyers", Hall-Scotts also serve in landing boats, picket and patrol boats, aircraft rescue boats, motor torpedo boats, and many other types of craft. The lessons learned in this most rigorous of all schools will make the post-war Hall-Scott an even finer engine.

ARMY E NAVY

HALL-SCOTT MOTOR CAR COMPANY

DIVISION OF AMERICAN CAR AND FOUNDRY MOTORS COMPANY, 2850 7th STREET, BERKELEY, CALIFORNIA · NEW YORK BRANCH: 254 WEST 31st STREET · LOS ANGELES BRANCH: 5041 SANTA FE AVENUE · SEATTLE BRANCH: 117-121 YALE AVENUE, NORTH · NEW ENGLAND REPRESENTATIVE: MARINE EQUIPMENT COMPANY, 131 STATE STREET, BOSTON, MASSACHUSETTS

Owners say: "She's a Honey!"

And no wonder! There's a whale of a lot of fun, comfort and seaworthiness built into this 30-footer. You see, the Owens Sport Fisherman . . . as well as the Owens Sedan . . . are the results of two generations of scientific boat building. Result: Owens owners get the best design, materials and workmanship for *less cost*. If you're a deep-sea fisherman, you'll go for an Owens' ample freeboard and seaability . . . if you fish shallow waters you'll boast of her 2′ 3″ draft. She's a sportsman's dream!

Plenty of Space for casting or trolling. And you'll need room when you bring the big ones to gaff! With all this cockpit you wouldn't think there was a spacious galley, big lavatory and two-bunk cabin up for'ard, would you? Six-foot headroom throughout, too. There's a lot of boat packed into that sturdy 30-foot hull.

Built to Last: Look at those ribs. They're all selected straightgrain white oak, steambent to shape. And all one piece from keel to sheer. Notice how closely they're spaced . . . only six to seven inches apart. Mister, that says strength, safety and long life! An Owens is built to take it, year in, year out. They're tough!

1943 Model is this "crash boat" for the Army. But come Victory, Owens will swing into production of the sweetest new cruisers ever. Meanwhile, let us send you our pre-war catalogue. Just ask for Catalogue Y. Owens Yacht Co., Baltimore, Md.

OWENS 30 ft.

The Ideal Cruiser

Owens Yacht Company, Dundalk, Baltimore, Md.

Speed Victory . . .

BUY U.S. WAR BONDS AND STAMPS

"What?" "Lt. Porter, speaking," "Oh!" (gulp). By that time they had forgotten what they had called about. Then the next hurdle was Navy correspondence. Hundreds of green, pink, yellow and white copies of each letter or memo; what did they mean, where did they go, who signed "by direction," what were "In and Out" baskets, where did the copies belong? Oh, to heck with it all, use the round file (waste basket to the uninitiated)! Why did you put your initials on thousands of dollars' worth of material? Well, we've conquered it all now, can even write a passable Navy letter, "From, To, Reference, Enclosure" etc.

Once out of the office, the next great hurdle was saluting. On Constitution Avenue or 17th Street you either made your hand fast to your hat with a little glue and kept it there or else you skipped the whole thing, hoping your raincoat was hiding your stripes, except in the sad circumstance of unintentionally knocking down some "scrambled eggs." Then, do we or do we not accept a seat in a bus from a full Commander; do we walk on the left on the street side of a ranking male officer? These questions rocked Washington for weeks but the Navy has finally decided that we are ladies first and Naval Officers second.

We're old and experienced Naval Officers now but we still blush to remember the other day, after three months in Washington, we were caught between two ferocious Marine Guards in the main entrance of the Navy Building with no identification pass, and had to telephone our secretary to come out and identify us. She led us back by the hand.

We have been asked how our background of nautical experience fitted us for our present jobs. We both start talking at once but the gist of it is an indignant "No!" One of us for a couple of months was well mixed up with small boat propellers. To our way of thinking, small boats should be propelled only by the wind. We can remember, with much swearing under our breath, dishes knocked off cabin tables in quiet harbors by those devilish power boats. But we sat all day at our desk, struggling with the pitch and diameter of propellers in the small boat section. The nearest we got to sailing was one cold winter's morning when a one-man rubber boat with a bright red sail was to be given a trial run in the Reflecting Pool before the Lincoln Memorial. It was blowing about 25, there were white caps the whole length of the Pool and, when the spray dashed up, it froze in sheets of ice. We assisted rigging the red handkerchief and then stood on the edge of the Pool eating our heart out; how did one go sailing in a Navy uniform with the tight skirt and slippery black shoes? Oh for a suit of oilskins and rubber boots! In the office the other day, we heard a young ensign trying to order, on the telephone, "Hats, officers, foul weather" and saying: "We believe this refers to a hat like a fire chief's!" But, even being a WAVE j.g., don't say: "Sou' wester to the initiated."

The good old cruising days aren't completely gone forever. A while back, when snappily saluting a Commander in front of the White House (automatons that we are), we suddenly realized six paces beyond him that the last time we had seen him he was hidden behind a green mug of hot buttered rum in the smoke-filled cabin of the *Roarin' Bessie* at a Cruising Club Rendezvous. The White House guard stared, as "Officers and gentlemen" let out whoops of recognition which reverberated from the grounds of the Presidential Mansion. We have even been to Norfolk on the Saturday night boat just to hear a bell buoy ring and to be able to say out loud: "Red to port, black to starboard, outward bound," though it meant a train ride of seven hours to get back in time for 8:00 Monday morning. It gives us hope. We may be banished from the sea but, at least, we can still feel a shift of wind to the east'ard on the corner of 17th and Constitution, or say to ourselves on a dirty day, as we watch the seagulls sitting on the grass of the Oval in front of the White House, "There must be a storm out to sea!"

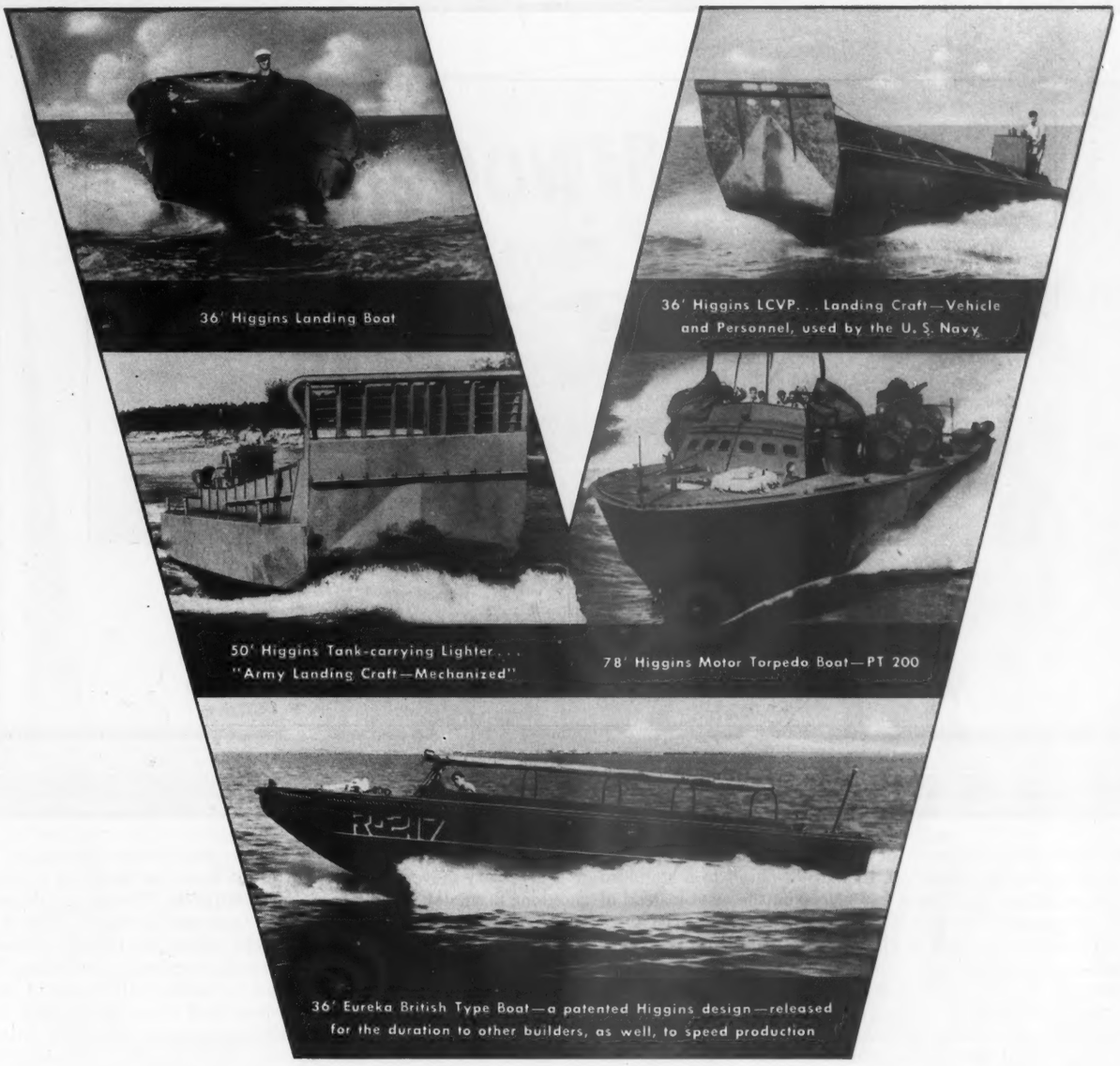
CHESAPEAKE BAY CRABBING SKIFFS

(Continued from page 43)

bugeye but with no jib. I have noticed the older men refer to sloop-rigged skiffs as "skipjack rigged," so the name "skipjack" seems to apply to rig rather than to hull form, at least in the minds of some Baymen. A "three-sail bateau" is a bugeye-rigged skipjack or skiff.

Since the sloop rig has been mentioned, this is a good place to illustrate a sloop-rigged skiff. Figure 3 was drawn from measurements taken off a fine skiff at Cambridge Creek in the fall of 1940. This boat was in a dilapidated state and has since gone to pieces. In spite of this, she showed plainly, in both model and construction, that she was the work of a finished boat-builder. Her hull was a miniature skipjack except that she did not have the "longhead" or clipper bow of the larger boats. The hull was built in the same manner as a large skipjack; there was a heavy keelson hewn out of a natural crook to the profile of the rabbet and with the fore end shaped to form the forefoot, below the chine. The bottom was herringbone planked.

The rig shows the "balance jib." The method used to secure the heel of the sprit of the mainsail is not the classic figure eight "snotter" but a short length of line spliced into an eye to form a slip noose around the mast with the tail passed through a hole, or notch, in the heel of the sprit and secured


36' Higgins Landing Boat
36' Higgins LCVP. . . Landing Craft—Vehicle and Personnel, used by the U. S. Navy
50' Higgins Tank-carrying Lighter. . . "Army Landing Craft—Mechanized"
78' Higgins Motor Torpedo Boat—PT 200
36' Eureka British Type Boat—a patented Higgins design—released for the duration to other builders, as well, to speed production

5 Different Fighting Boats

—all by Higgins—all use Anaconda Metals

Down in New Orleans everyone talks about fabulous Higgins Industries Inc. Fighting craft they build, in unbelievable and secret numbers. No secret, however, is their ingenuity at design. The exclusive Eureka-type boats are so perfectly suited to invasion needs that other boat builders are supplying them under Higgins' patents.

And playing an important part in their construction are large amounts of sea-going Anaconda Copper and Brass... Everdur* fastenings... engine fittings of durable copper . . . struts of bronze . . . exhaust louvers . . . deck fittings.

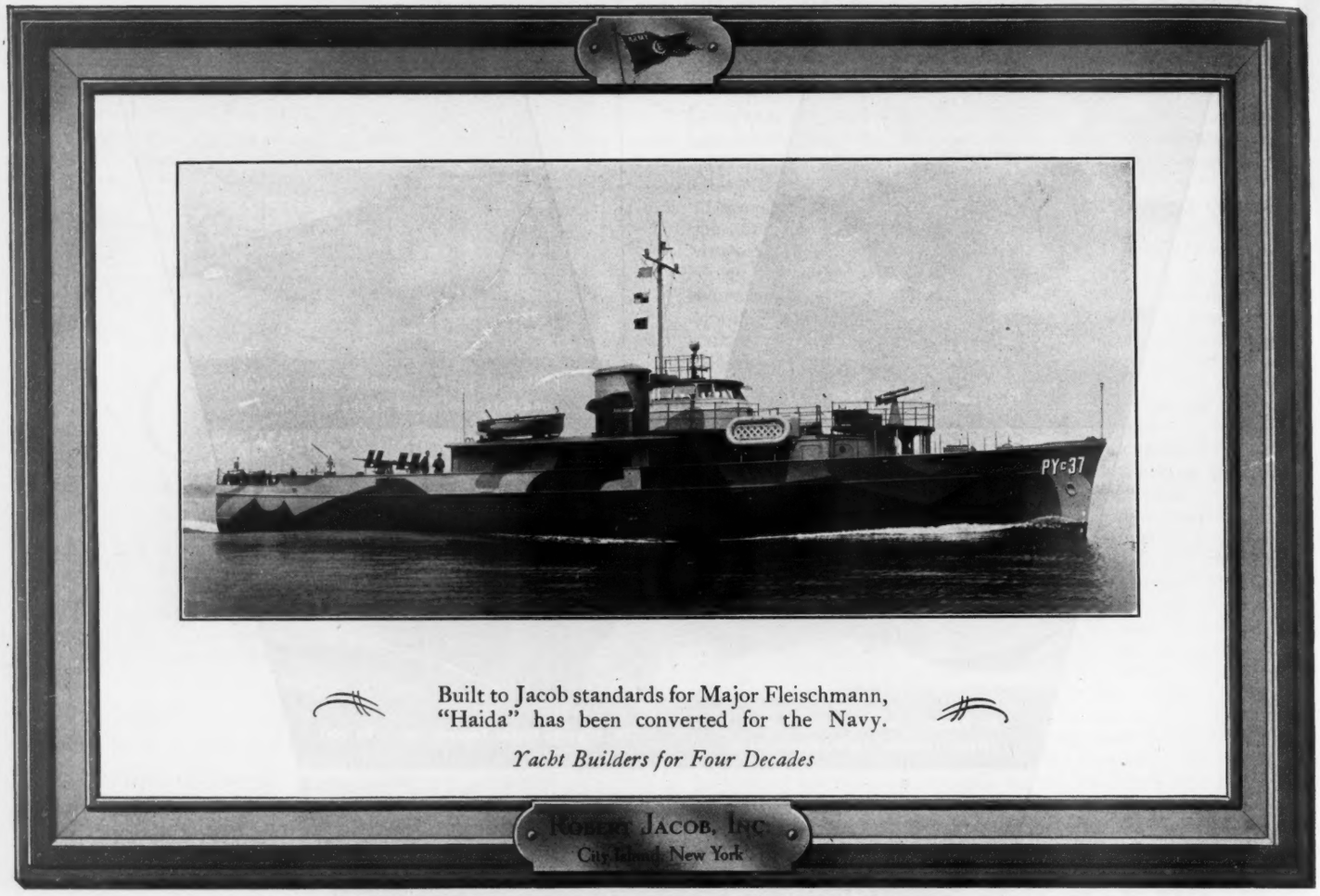
Naturally, we are proud of the important uses that Higgins and so many other shipyards are making of Anaconda Metals. When the war they are helping to win is over . . . we will be ready with the same durable copper and brass products for building the thousands of pleasure craft that peacetime America will want.

*Reg. U. S. Pat. Off. 43129

THE AMERICAN BRASS COMPANY
General Offices: Waterbury, Connecticut
Subsidiary of Anaconda Copper Mining Company
In Canada: ANACONDA AMERICAN BRASS LTD., *New Toronto, Ont.*

ANACONDA

Anaconda Copper & Brass



Built to Jacob standards for Major Fleischmann, "Haida" has been converted for the Navy.

Yacht Builders for Four Decades

ROBERT JACOB, INC.
City Island, New York

to a small cleat on the side of the sprit; or merely tied around the sprit. In recent years, it is not uncommon to see the sprit secured to a standard boom band (with small horse and traveller) placed on the mast instead of the older noose; this prevents the sprit from binding against the mast.

Returning to the hull of the skiff in Figure 3, this model has been considered the fastest until recent times when the smartest skiffs are those built without forefoot, like a Clapham Nonpareil Sharpie. The rudder form is that used in the earlier skiffs; it probably was the original shape of the rudder fitted to the Flattie Skiff in Figure 2.

Though the sloop-rigged skiff was common, the two-masted rig was popular in some localities, particularly around Cambridge. The rig was usually the two leg-of-muttons, with the larger sail forward, used at one time in log canoes. A few skiffs had a bowsprit and a balance jib but these were usually racing or pleasure boats. The hulls were much alike in appearance, varying in dimensions and in amount of deadrise. All seem to have had raking ends and strong sheer; there was usually a good deal of flare to the sides. This model of skiff is one of the most seaworthy of the Crabbers, owing, no doubt, to the need of an able boat in the rough water at the mouth of the Choptank. While a few of these skiffs were flat-bottomed, most of them had a good deal of deadrise, as in the example. Though the deadrise skiffs could not carry as much sail as the flat-bottomed boats, they were drier and would tack with greater certainty in choppy water. It is a noticeable trait of wide, flat-bottomed craft to lose headway when coming about in rough water, and then pay off excessively before pointing up on the new course. Such behavior is really dangerous in an open or half-decked boat unless the main sheet is handled carefully. The construction of the skiff shown in Figure 4 is the usual Bay deadrise type.

The hanging of the centerboard in Bay skiffs, and in skipjacks too, is quite different from standard practice elsewhere. Instead of merely using a pivot bolt and a bearing in the board, the Baymen generally prefer to slot the pivot hole in the board at an angle to the water line, with the top of the slot higher than and abaft the lower end. This permits the forward portion of the board to extend a little below the keel or shoe when the board is hauled up; if the boat strikes the bottom, the fore end of the board will rise since the pivot can travel in its slot. The forward lower corner of the centerboard must be well rounded, of course, to prevent its catching or hooking an obstruction. The advantage of this is that a larger area of board may be used when the boat is in extremely shoal water and the board hauled almost up in its case, yet the whole board will enter the case if it strikes bottom. The board is usually 4″ to 6″ shorter than its case opening, to permit the necessary movement. The slot in the board for the pivot is from 3″ to 6″ long in small boats, 6″ to 8″ in the skipjacks. Wooden pivots are preferred to metal bolts, locust or white oak being used in the majority of skiffs. The centerboard is rarely ballasted yacht fashion; the board is made of oak and heavily bolted with rod so that it sinks; requires no ballasting. The boards are much thicker than are found in yachts with boards of similar area.

In recent years, the Smith Island Skiff shown in Figure 5 has become quite popular on the Shore. This is a highly unorthodox V-bottom model, as the sides actually tumble home amidships. The bottom is that of the Nonpareil Sharpie, planked fore-and-aft on widely-spaced frames, without keelson, chine log or other longitudinal framing. The strength of the hull depends upon the sides; the keel or skeg is a plank on edge cut in the way of the centerboard slot, as is the common Bay practice. It is rare to find a Bay-built centerboard hull in which the keel and rabbet are widened in way of the slot; the keel is usually the thickness of the board in width and stops short at either end of the slot. The inside keelson is made wide and heavy and the slot is cut in this member: this avoids a lot of work in shaping the keel to a taper fore-and-aft as required by the usual yacht design. In the Smith Island Skiff, the centerboard case is fitted with logs to insure good fastenings but, on the whole, the boat is rather weak around the case and so is likely to develop a leak; undoubtedly, this is due to the lack of a keelson. This is one of the two Bay types of deadrise small boat that is fore-and-aft planked on the bottom. The result is that the Smith Island Skiff has a much fairer bottom than is found on the general run of herringbone planked boats; this has permitted her to attain high speed and so has given her a good reputation with the watermen. The tumble home of the sides, so contrary to yacht practice in V-bottom sailing models, is claimed to make the boats more close-winded than those with flaring sides. While there may be some truth to this claim, when the boat is in such shoal water that she cannot use the full area of the board, it is doubtful if the advantage is great enough to outweigh the obvious objections. The speed of this class of skiff is due to the fairness of the bottom, forced on the builder by the fore-and-aft planking. The model and construction of these skiffs are limited to boats under 20′ over all. The model is built at Crisfield as well as at Smith Island. Because of the success of this particular model, many watermen are convinced that flare is harmful to speed in sailing craft and so a number of wall-sided skiffs have developed; these are, in general, dangerous boats in blowing weather.

EVINRUDE POWER for Swift Storm Boats

"Storm Boats" they're called . . . these slashing little hurricanes of power and speed. They can float in mere inches of water. They can weave, twist, dart like furious hornets. And they can whisk a landing force to a beach in a breath-taking hurry!

Motors for the Storm Boats . . . motors jam-packed with power and stamina . . . the assignment to build them was given to Evinrude. Years of experience building great racing Evinrudes, mightiest of outboards, gave quick answer to every requirement of speed and ruggedness and "fighting heart". Down the production lines they came . . . dynamic "storms" of eager power to drive the fleets of Storm Boats!

Giving top speed to assault craft . . . driving heavily laden barges and lighters . . . capably powering small boats of every type . . . Evinrude motors are serving on many fronts! Building for Victory is our sole job now . . . with peace, there will be brilliant new Evinrudes for happy days on the water again.

EVINRUDE MOTORS, Milwaukee, Wisconsin
Evinrude Motors of Canada, Peterboro, Canada

EVINRUDE
OUTBOARD MOTORS

★ HELP SPEED VICTORY . . . BUY MORE BONDS

FOUR NIGHTS...
or Forty
ON THE OPEN SEA
WINNER WATER LIGHTS CAN MAKE A DIFFERENCE!
Because they float in an upright position with a bright light visible for many miles.
APPROVED BY MERCHANT MARINE INSPECTION—U. S. C. G.
Automatic; no switches to operate or mechanical parts to get out of order. Light the instant they hit the water. Burn continuously a minimum of 10 hours. Can be extinguished by inverting the case.
Absolutely safe; will not explode as no gases are created; will not set fire to floating oil or gasoline.
Equipped with metal ring for attaching to raft, float, buoy, etc. With metal holder for securing to rail or flat surface.
Length 21½"; diameter 1¾". Shipping weight 3 lbs. including standard flashlight batteries.
West Coast Licensee
HUNTER BOAT CORP.
Suisun City, Cal.
Winner MFG. CO., INC.
104 RAILROAD AVENUE • WEST TRENTON, NEW JERSEY

THE POST-WAR SMALL BOAT

(Continued from page 45)

without rails such as Comets, Snipes, Lightnings, Stars and small power boats. Briefly, the method of applying the canvas with this system would be as follows: The boat would be complete, with grooves cut and finished in all ways except for canvas. The canvas would, if not already wide enough, be sewed into one piece the width of the boat. It would then be stretched over the deck and held as taut as possible. The spline is then driven into its groove around the gunwale and this stretches the canvas tighter. After trimming the canvas outside the spline, the half oval can be screwed down. Then we gently throw a weight onto the canvas stretched across the cockpit opening. This pulls things still tighter and we drive home the spline around the cockpit coaming which gives the fabric its final stretch. The canvas in the cockpit is then trimmed and, after screwing down the moulding covering this last spline, the job is done. Light weight mast track for little boats or slotted tubes to screw to the after side of the mast and enclose the bolt rope of the sail are other possibilities.

And now for that deck canvas. Safety glass, as used in automobiles, has been made by sandwiching a sheet of vinyl resin between two pieces of glass. When stopping production of automobiles put an end to that, a new use for the vinyl resin was hastily sought. It was found that flexible, rubber-like sheets of the resin could be rolled on and permanently attached to fabric by heavy calendering rolls. The resin is tough, flexible and water-proof. It can be given colors and the surface texture of resin fabric combination can be controlled to give a non-skid deck covering.

At least a year ago "Beachcomber" told us of Saran tubing. Saran is a thermoplastic synthetic resin and the tubing, like the other extrusions, can be heated in hot water and bent to all kinds of curves. It is lighter than either hose or metal pipe. The usual type of compression fittings may be used but the pipe can be welded together by heating the two ends on a hot plate or frying pan until they are soft and then simply pressing them together. This type of weld soon develops the full strength.

Another surprisingly simple development is the low pressure laminating of resin impregnated paper and cloth. It has been the past practice in making laminated plastics, like Formica or Micarta, to use high pressures of the order of 1500 to 3000 pounds to the square inch. This required expensive presses and costly dies if special shapes were required. As a result, almost all laminated plastics were made in stock shapes such as sheets, bars, rods and tubes. These have been machined and fabricated into small parts or products just as stock metal shapes would be machined or fabricated. It has recently been found that the lamination of both resin impregnated fabric and paper can be accomplished satisfactorily at much lower pressures. This means less expensive equipment and dies. The product has lower density than high pressure laminates but a much better strength-weight ratio. Cloth and paper laminates are now being used to mould shapes with the bag moulding process described in Part I. In this process, a single mould or mandrel of some inexpensive material like wood is all that is required, and such things as gunner's seats, gas tanks, wheel pants and fairings are now being made for aircraft. A new material known as Corolite, consisting of sisal fibers impregnated with resin, is made by the Columbian Rope Co. into gas tanks and similar pieces in this same way. The advantage is that light weight, intricately shaped structures may be formed with low die cost. In stock boats, lighter, cheaper tanks for both gas and water can be formed to fit into odd shaped parts of the hull where they will be out of the way and leave more valuable space for other purposes.

We can confidently expect the appearance of our boats to improve and the maintenance effort and cost to fall through improvement of finishes. Strong though the appeal of such improvement may be, there is little more of a general nature that we are able to say about them. The appearance of the finished job will probably change little although the method of applying the new finishes and their drying time will no doubt vary considerably. In the main, the changes will continue the improvements that have been taking place for some years through the use of synthetics. These are already somewhat familiar to the yachtsman. The use of plywood, moulded plywood and particularly impregnated plywood, will help make finishes more durable because of their greater resistance to moisture change which means that the finish is not called upon to go and come to such a degree when the wood shrinks and swells.

We have carefully avoided any detailed discussion of the possible cost of the new materials so glibly predicted. Fabrication costs, particularly in such cases as compression and injection moulded and extruded plastics where the total cost is high, will be largely dependent on quantity requirements. There are too many unpredictable factors which will make up the cost of raw materials to permit predictions by any but the closest students of this problem. In the case of the various synthetic resins which are supplied to the moulders to a large extent by the big chemical companies, not only the quantities in which they are produced but such obscure things as available by-products or excess plant capacity after the war, as well as company and government policies, will enter the picture. It does seem safe

Here are your

MARINE SIGNALS with POWER

. . . VARIETY OF TONE

. . . HIGHEST DEPENDABILITY

NAVY TYPES and MERCHANT MARINE

New Marine Signals of most advanced design, developed by this pioneer manufacturer of electrical audible signals, are now being bought for U. S. Navy and Merchant Marine. There is a signal for every need—wide variety of tone in horns, bells, powerful buzzers. Designed and made by Schwarze Electric Co. for extra performance, easier installation, and saving of critical materials.

SCHWARZE FARADAY

These modern signals, designed for war's exacting demands, will be available for general use on commercial and pleasure boats later.

Write or wire for detailed 12-page bulletin (No. 43-M) illustrating and describing these signals. Those illustrated at the right are just a few of the very complete line.

Branch Offices in Principal Cities

TYPICAL EXAMPLES

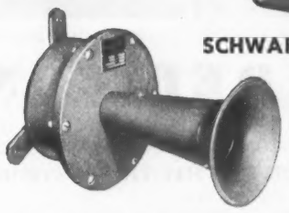
FARADAY MARINE BELLS

Built to specifications of U. S. Merchant Marine. AC or DC Heavy Duty. Absolutely watertight. Cast iron or pressed steel. Includes famous Schwarze "Power-Pact" mechanism.

★

FARADAY MARINE BUZZERS

Assure peak performance. Use minimum critical materials. Watertight.



SCHWARZE MARINE HORNS

For extra signaling power and dependability, available in variety of tones, single projector, two-way or grille type. AC Mechanisms have only one moving part; DC one plus contact assembly; highly efficient and long-lived. Vibrating horn tone of great intensity. Fully watertight.

Also famous *Kodaire, Air Trumpets, Sirens,* Marine Panels, Pushbuttons.

WRITE TODAY FOR MARINE SIGNAL BULLETIN NO. 43-M

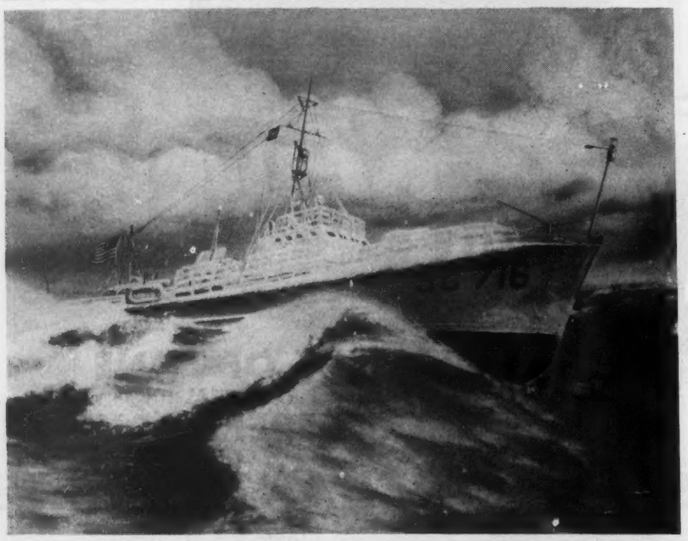
SCHWARZE ELECTRIC COMPANY

1926 CHURCH STREET • ADRIAN, MICHIGAN

Recently awarded star for continued excellence in production

Day and night . . . through sunshine and sleet . . . our Navy is constantly on the alert for the prowling "subs." Here at Fisher Boat Works, Inc. we're naturally proud of the fleet of modern sub-chasers we've built and which are now getting in their deadly licks against the foe.

We're Proud to Serve ★



Fisher Boat Works Inc.

DETROIT

UNDER CONTROL!

SPLIT-SECOND ACTION DEMANDS SPLIT-SECOND CONTROLS. THAT'S WHAT THESE PATROL BOATS HAVE—

because their PANISH built engine controls translate their skippers' thoughts into immediate *Action.*

PANISH controls are serving on the sea frontiers now — and they will be available to you, so that your boat too can have split-second maneuverability — after VICTORY is won.

★

FOR EXCELLENCE OF PRODUCT AND PRODUCTION WE HAVE BEEN HONORED WITH THE ARMY-NAVY "E" AWARD

PANISH CONTROLS, BRIDGEPORT, CONN.

to say that the competition for civilian markets between the old standby materials and the new ones which have replaced or substituted for them during war scarcities is going to be most keen. Every effort by both industry and government will be made to keep all plants operating at or near their present high level. This means that prices will be forced as low as possible. We have all seen in many cases, such as high octane gasoline, synthetic rubber and even aluminum, how the prohibitively high prices of today may crumble before the technological advance of tomorrow. We can only assume that the uses being made of synthetics today under war pressure will be economically practical when the war is won.

Neither have we made any important reference to new metallurgical developments and the effect they are bound to have on our post-war boat. While these developments are certainly taking place, they seem less spectacular because they are less apparent to the eye. The improvement in the properties and characteristics of the various metals and alloys and their possible new low prices will be felt largely through the better and more general use that will be made of such things as bronze fastenings, shafts and so on. Stainless steels and other non-corrosive alloys will no doubt be much more prevalent, both in structural parts and non-structural uses such as dresser tops and stoves. We do not, however, look for new large structures such as hulls or cabin houses to be generally made of metal in the small boat of the immediate future. One reason we do expect this of the resin bonded or laminated materials is because of new low cost methods of forming and manufacturing in small quantities such as the bag process of making low pressure mouldings. It is true that great developments are taking place in metal working fields but they are largely directed towards production in such quantity and involve tools so costly they are beyond the reach of the boatbuilder.

While it is our belief that all of the ideas or new features put forward here are theoretically possible and probably will be economically practical, it is not our belief that they will all necessarily become actualities. The public as a whole and sailors in particular do not take readily to changes. They have to be educated to accept them. Such an education or promotional program takes time and costs money. Many new ideas just do not "take" regardless of their merit. Quite possibly, the cost of development or promotion may constitute too great a risk for the possible return. The pleasure boatbuilding industry is made up largely of comparatively small units which do not have resources for extensive promotion of new products. For these reasons, many possibilities will be slow in appearing or may never see the light of day. Building small boats is still a handicraft in many ways and their use is a sport, so the course of their development may not necessarily follow the path of normal economic and technical progress. There is, however, one almost universal feature possessed by all of the developments that we have proposed, and that is light weight. Weight is such a fundamental factor in boat design and the possible total savings seem so great that, when the effects are fully realized, we may expect them to be fundamental in themselves and far-reaching.

LIFE BOAT PASSAGE

(Continued from page 27)

Despite the boat's initial mishap, most of the other emergency equipment was there, if a trifle wet: lantern and kerosene, distress signals, bilge pump and bailer, flashlights, signal lamps and mirror, a chart in a watertight container and fishing tackle. But we lacked two important accessories: neither the sea anchor nor any storm oil were to be found. We therefore set about to improvise an anchor out of a piece of canvas and some metal canisters. But without a palm and needle we weren't able to do much.

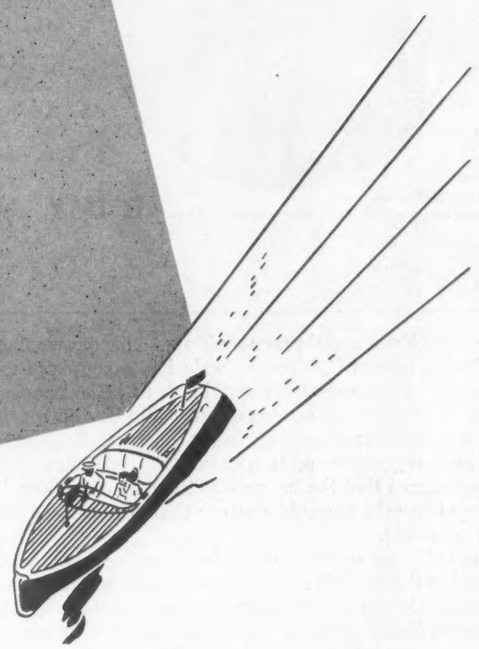
The next morning gave early indications that we should soon have what a Swedish friend of mine would describe as "planty o' vind." We did. By noon, the seas were slopping over the gunwale fairly frequently. This kept us quite busy with the pump and a couple of buckets. There was no way of shortening sail, so early in the afternoon we doused sail and hove to, keeping her into the sea with the oars. This was not so hot. She fell off continually and we got some unpleasant slaps from breakers and it was constant "pully-hauly" at the oars to keep her into it. The watch-in-three that I had set up the day before was changed to watch-and-watch, but it was obvious that the men couldn't keep that up long. So we turned her stern into the sea, and found it a lot easier to swing her into an oncoming roller with a "Give way starboard, hold water port," or vice versa.

We had put my not very ingenious sea anchor over the bow, but I think it only irritated an approaching wave. I soon replaced it with a bucket on a bridle, using our sea painter, and this was better, especially when we swung stern to. I think it was something of a deterrent. Later on — during that awful night — I can remember looking back on that tumbling waste of water and foam. Just astern of us was the one cheering sight in that whole grim panorama: the phosphorescent glow about that bucket as it seemed to dig its heels in and pull back on the bridle.

By nightfall, it was blowing a fresh gale from the southwest, with the wind still growing. So far, we had been all right, for in the daylight both

BUY WAR BONDS
EVERY
PAY DAY

Things are *happening* in Boat Building



The greatest program of marine building ever undertaken in the history of the world is being carried on today—by *American* boat builders. The need for boats of superior design and fine quality, plus the urgency of speed, have brought about developments in construction that will definitely benefit the buyer of future pleasure craft.

Century is making an important contribution to today's great effort. Storm Boats and Assault Boats, those versatile small craft which are so important to the movement of troops and material, are being provided in quantity—and with traditional Century soundness. The speed with which they are delivered is the result of improved construction practices.

You may expect to see the influence of these improvements in finer models of Century pleasure craft which will be available when the war is won.

CENTURY BOAT COMPANY, Manistee, Mich.

Century

BUILDER OF
FINE BOATS
INBOARD AND OUTBOARD

SWITCH ENGINES of the SEA

☆ ☆ ☆

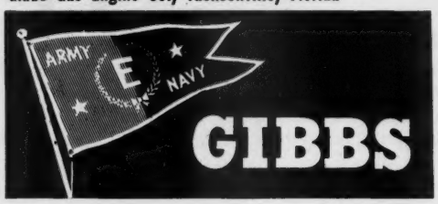
Inset shows generous deck room of these Gibbs harbor tugs.

HERE'S an example of Gibbs' versatility and design skill—a combination harbor tug and derrick scow. Highly maneuverable, with maximum deck-room and remarkable stability, this 200 hp tug is ideal for congested harbors.

This is but one of the designs now being turned out by Gibbs for the United States Navy . . . one of dozens of harbor tugs, sea-going tugs, mine-sweepers and patrol chasers.

We're in full war production now. But when peace comes the Gibbs facilities for construction and repair of all types of metal and wooden work-craft and pleasure-craft will once more be available to individuals and companies that want the extra values born of Gibbs experience and skill.

Gibbs Gas Engine Co., Jacksonville, Florida



BUY WAR BONDS

the helmsman and the men at the oars could spot a big one coming, and get the stern swinging toward it. Even so, we'd had a couple of unpleasant jolts when a wave broke against our metal hide with the "pong" of some grisly jackpot. With darkness coming on, it would be difficult, if not impossible, to see a roller far enough off to get set for it. To say that I considered our situation grave would be a gross understatement. As the gathering gloom announced that the sun was, as the Portuguese say, "going to bed," I no more expected to see him return than if I had just stepped off Bunker Hill monument.

This was probably an unnecessarily dismal estimate of the situation. But as I listened to the roar of those seas grow louder and more ominous — thinking "Now would I give a thousand furlongs of sea for an acre of barren ground, brown furze, anything" — I didn't see how we could possibly keep from being capsized. The seas were already coming from a wide angle. All we had to do was to fall off so that one of those horizontal cataracts could catch us broad on the quarter, and we'd be rolling over and over like a piece of driftwood on the beach at Easthampton. However, we lashed everything and prepared for the worst.

Early in the evening casualties began. The bushings that held the rowlocks were of brittle iron, and one by one they fell apart under the heavy strain when a wave caught the blade of an oar "full and by." Before the night was over, every one of them was broken and we had been obliged to lash the rowlock to the gunwale. This was not efficient but it enabled the man to work the oar. No. 2 port was the last one to go and, in that dark welter of men and gear and water, there was nothing to be found in the way of a lashing except a short length of wire. So, for two hours thereafter, a pint-sized engineer squeezed himself into a pretzel shape between the men at the oars and held that rowlock in place with the wire.

It was probably around three o'clock in the morning that the gale reached its full fury. Peering anxiously into the blackness astern, I saw seas converging upon us from either side, baring their teeth with a menacing roar, like the wolves pursuing the Russian nobleman's flying sleigh, in which there were no babies to be thrown overboard. Which of these ravening crests would reach us first? Often my first guess was wrong and I had a few seconds to get the boat swinging in the right direction. Half a dozen times the boat heeled at a fearful angle as one of those white-fanged wolves crashed against our side, and time and again the oarsmen were up to their waists in foam as a breaking wave savagely swept the boat from stern to stem. It was no longer watch-and-watch, for all hands were continuously at the oars or bailing, with a chance for one or two at a time to drop out for a few minutes "blow." A couple were actively sick.

To the ominous snap of ruptured bushings was soon added the noise of rending oars. Picking the boat up bodily, a sea would slide it sidewise. Perhaps one of the men had his oar too deep. The next instant, the blade was buried vertically, the handle flew upward and, before he could boat it, the oar was snapped. Before the night was over, we had three oars left.

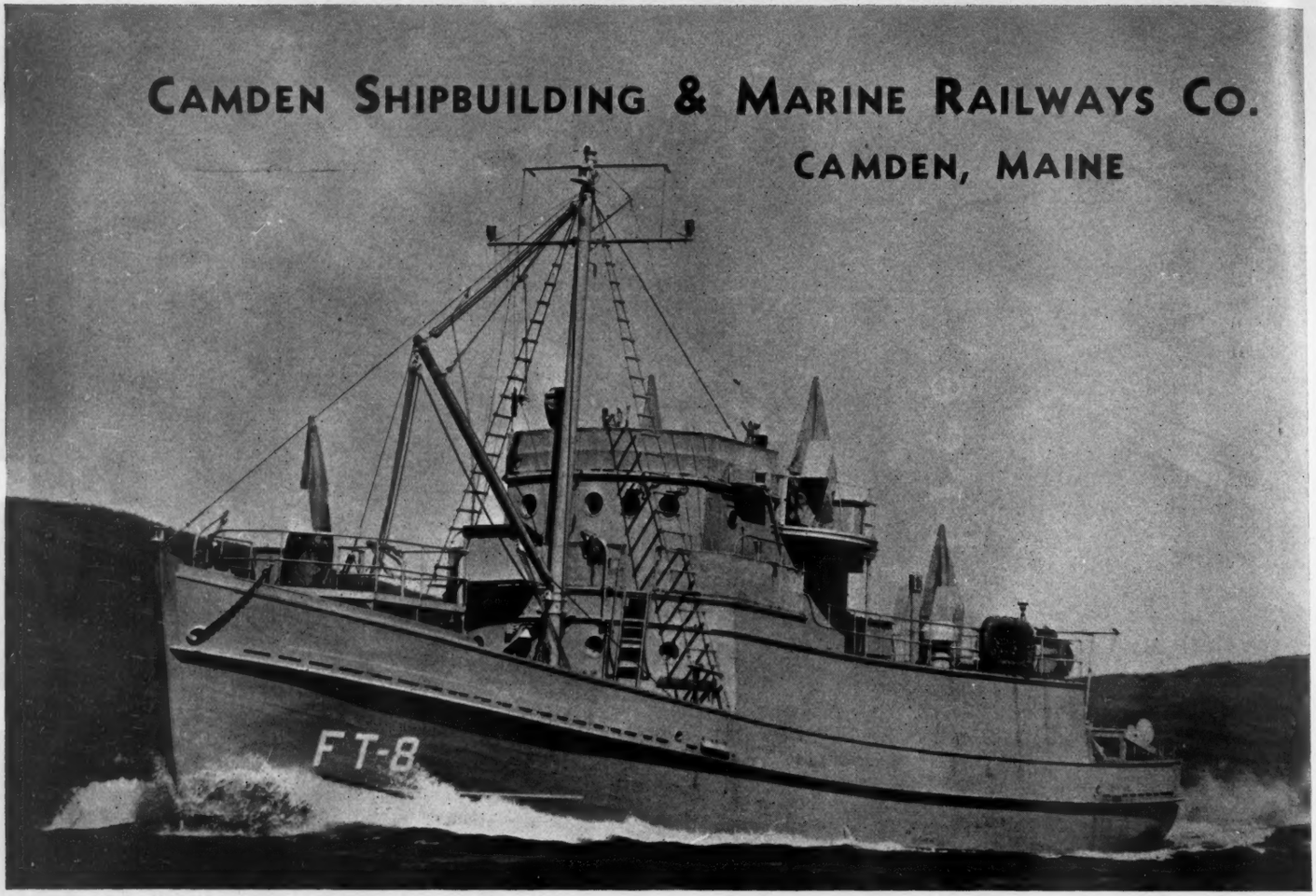
When daylight broke the next day it was blowing from the northwest, a very chill wind, but it was obviously moderating and within an hour we were sure that the worst of it was over. After thirteen hours at the helm, I practically fell asleep in the middle of a command to the oarsmen. I awakened that evening to find my hand badly swollen and painful. During the gale I had been aware of a pain in my thumb, on which there had been a small burn. It was now obvious that this was a virulent infection. At any rate, that was the end of my left hand as far as any useful function was concerned, as it had swelled to three times its natural size. This was inconvenient, to say the least, as I am (or perhaps was) left-handed.

Sometime around noon the next day my temperature, which had risen with the infection, fell enough for me to think and talk lucidly, which must have been a tremendous relief to my companions. I found that the wind had dropped to a light breeze and, while the boat continued to bounce around for the rest of the day, we shipped no more seas — except when a bucketful or two slopped over from one of those bastards bred of every gale that suddenly leap at you from practically any direction. We therefore stepped our mast and set the sail. It was disappointly ineffective; scarcely gave her steerage way and didn't steady her appreciably. And it was a pain in the neck to have to use a steering oar under those conditions; about like using snowshoes on an inch of wet snow. But fortunately the wind was fair for the course to the Azores and the weather promised to be good for some time. Pending results from celestial observations, I assumed that the gale had pushed us 25 or 30 miles to the east, and accordingly set a new course to the left of our original one.

It was about this time that we ate our last oranges and I can tell you we were sorry to see them go. They and the apples had been nectar for, although the temperature was around 70°, you would be surprised to find how thirsty you get when you have only a few ounces of water a day. Furthermore, emergency rations, though bursting with vitamins, tend to produce a savage thirst. These rations are carefully checked, renewed each time the ship returns to port, and sealed in two watertight metal boxes. They are sufficient for a minimum of 30 days for a full boat's crew.

We did not start on ours until we had been out three days, the crew subsisting for two days on the fruit — which obviously couldn't last — and a great quantity of peanut bars, which two of the men obtained by breaking

Only
In the Land of the Free
WHEELER



into the "slop chest" upon their return to the ship. We decided to have three meals a day, at each of which each man would receive three ounces of water. Breakfast was at 7:30 and consisted of two malted milk tablets and a biscuit or cracker known as the "C-type ration." Malted milk tablets are tasty in a glass of hot milk but they are exceedingly dry by themselves. The C-type ration, in shape and size like a graham cracker, is somewhat harder than a dog biscuit and nowhere near as toothsome.

Lunch, at noon, comprised two more milk tablets and a square of milk chocolate. It was good chocolate, but have you ever tried to get real tough clay off the anchor and the deck? It takes a hell of a lot of water.

Supper offered two more tablets and the one appetizing viand in our larder, pemmican. Though many of you may have eaten it, I'll venture to describe it. It is made of raisins and meat and other concentrated and highly nutritious foods, and it's greasy and wet, which makes it go down easily. It tastes like some sort of plum pudding with hard sauce.

Two days later, we bent a critical eye upon our sail and became extremely dissatisfied with it. Everybody was encouraged to suggest improvements and we thereupon began a series of experiments in which we hung up that amorphous polygon in half a dozen different ways. The winning design went to a seaman who made a yard of the gaff and spread it as a lug sail. The new rig was a great improvement — grace itself compared with the previous one — and we immediately began to foot faster.

In the morning, I undertook to find out where the gale had taken us. The navigational accessories were a limp and soggy lot. Although I had lashed them under the thwarts, they were all, in the police reporter's phrase, "suffering from immersion." The chronometer was still ticking but the face was half full of water, and the navigation books were soaking wet.

As I could not use my left hand, I instructed a signalman in the use of the sextant. It was no easy trick in that choppy sea. I can only compare it to taking a sight some Saturday night in one of the denser parts of Times Square, constantly thrust about, with one's elbows jostled by the surging throng. And the evening and the morning were the fifth day.

During the early hours of the next morning I devoted some time to determining the bearing of Polaris. I think it was in about these same waters that Columbus was alarmed to discover an unsuspected deflection of the compass. I can understand his consternation at finding, after several days at sea, that he'd put his faith in a treacherous set of corrupt and fickle magnets. The cause of error in our case — as important as his, so far as we were concerned — was that that confounded iron bathtub of ours had pulled the needle 15° or 20° to the westward.

It was the following noon that we got a latitude sight which looked quite reliable. For the first time, the sun had been unobscured for a good half hour on either side of the meridian, so we could be almost sure we'd caught her at top center. This showed us in the latitude of the Azores. Combined with a debatable longitude, this put us northwest of San Miguel Island. I therefore swung around to a course of 140°.

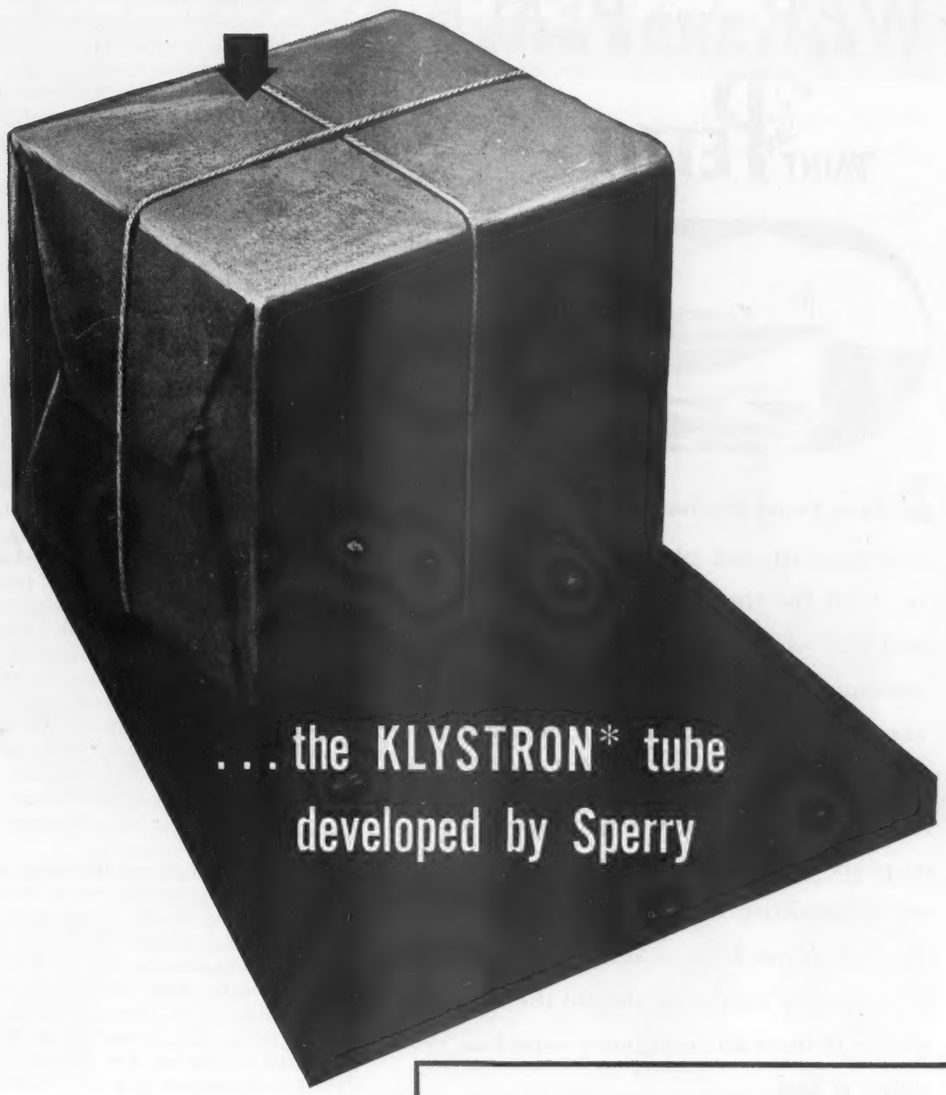
I think that that navigation was, for me, the worst ordeal of our entire boat ride. With my *Almanac* and "Ageton" soaking wet, the pages were stuck together as if they had been glued by some humorous Belial. It was therefore a temper-searing task to find your place in the tables. However carefully you pried the pages apart, half of a page would often come up in your hand. Not infrequently, the entry you sought was illegible, and you'd start over, with another sight. But, bless that galaxy of learned gray heads at the Naval Observatory, they print the *Air Almanac* on non-coated stock which stands up well under a wetting and is nowhere near as sticky as the coated paper of the *Nautical Almanac* and the Ageton tables.

Observations during the next two days consistently put us east of San Miguel. I was now faced with the most unpleasant choice I ever hope to make. Should we turn back and hunt for these islands, wretched little fly specks on that chart of ours? We might easily wander about for weeks. Or should we launch out upon a thousand-mile journey to the continent (which we couldn't *possibly* miss) with all its hazards of starvation and storm? I was fairly sure we were in the latitude of the islands; I wasn't sure that we were east of them. If we *were* west of where I thought we were, a course to Gibraltar might bring us within sight of one of the islands.

We inventoried the rations and found we had more than 30 days of everything but pemmican, of which we had 15. Of water, we had about 25 days at our established rate of consumption, which could probably be cut in two — with no allowance made for what just one heavy rain might do for us. I consulted the crew. Should we put her on the course for Gibraltar? I must confess, I felt it was as big a piece of hypocrisy as a Nazi election, for they hadn't any idea as to whether our navigation was good or bad. But the Fuehrer got a unanimous vote, and we swung over to a course of 97°. As it proved, it was a most fortunate decision.

During the next two days the clouds prevented any satisfactory observation except for fleeting glimpses of a couple of stars, which I was un-

Inside this package there's something important...



UNTIL the war is over, there are very few things that we can tell you about the KLYSTRON* tube.

We can say that it is a vital factor in electronics, that it was developed by the Sperry Gyroscope Company following initial research at Stanford University.

Right now, the KLYSTRON* is making very important contributions to essential military equipment. And other advances in this field have been made—after the war is over, some of these will undoubtedly contribute to the security and comfort of a world at peace.

SPERRY

GYROSCOPE COMPANY

BROOKLYN, NEW YORK

DIVISION OF THE SPERRY CORPORATION

*The names KLYSTRON and RHUMBATRON were officially registered at the U. S. Patent Office on October 3, 1939, by Sperry Gyroscope Company, Inc. KLYSTRON is registration No. 371650. RHUMBATRON is registration No. 371651.

IN WAR AND PEACE
PAINT PETTIT

Before Pearl Harbor, owners of yachts, fishing craft and pleasure boats looked to Pettit for the finest in Marine Paints and Varnishes. With America at war, quite natural that the Navy and Coast Guard should turn to Pettit Paints for fighting craft.

After V Day, Pettit will again be 100% on peace-time production. But meanwhile we're bending every effort to supply Uncle Sam yet help to keep private craft in operating condition should they be required to meet an emergency—*and we're doing it too!*

PETTIT PAINT CO., INC.
507-519 MAIN STREET, BELLEVILLE, N. J.

PAINT PETTIT
AND SEE WHAT SERVICE MEANS

able to identify. Then, about 9 o'clock at night, eleven days after leaving our ship, we picked up a flashing light a little to starboard. We stood toward it, and after two hours I caught a rhythm to it, proving it to be a navigational light. Not wishing to raise hopes unduly, I pointed out that, while it was probably a lighthouse, it might be an offshore buoy.

At the height of the discussion, we picked up another light, on the port bow. They were loath to quit that other one, but this was a steady light, and the other (which we later learned was the lighthouse on the northwest corner of San Miguel) was still a long, long way off. So I swung her over. During the next hour that light assumed some fantastic shapes, but at last we realized that it was a ship. We set off a parachute flare and I sent the signalman forward with a flashlight. What he sent I don't remember, but they came back with: "What do you want?"

The light of another flare must have given them their answer, and a few minutes later we were basking in the glow of a great rectangle of lights surrounding the legend "RED CROSS ✚ INTERNATIONAL."

It was a Red Cross ship, engaged in carrying food and clothing to prisoners of war. As my crew scrambled up a sea ladder, I patted her steel plates — to show my affection and to be sure they were real. Then the boatswain, bronzed, lean and kindly Portuguese who had once lived in Brooklyn, came down and took me on his back, for it was a job for two good hands going up that ladder. Near the rail, other hands grabbed me and pulled me over the bulwark and onto the deck. I stood erect to find a steward standing deferentially before me with a bottle of cognac poised above a goblet. "Would you like a drink, sir?" he asked.

Such an account should end "That's all I remember."

SAFETY AT SEA

(Continued from page 33)

attached to the garment. Of particularly sturdy construction, they zip up the front and by reason of the fact that the life preserver is inside the suit, the wearer is actually "nonsinkable." Not only do they provide both buoyancy and warmth but, for some strange reason, sharks will have nothing to do with the wearer of these marine "zoot suits." It is a matter of repeated record that sharks have attacked men wearing regular clothing but have studiously avoided men wearing life saving suits.

Speaking of sharks, the Navy reports that a substance has been discovered which will drive sharks away from men adrift in shark-infested waters. Developed in experiments at Woods Hole, Mass., in the ocean off Florida and in Guayaquil Harbor, Ecuador, its nature is a closely guarded secret. The Navy reports that: "Hungry sharks were found to refuse a bait, which otherwise they would have taken voraciously, if a small quantity of the shark repellent was suspended in the water near by. Three identical fish baits, the regular food of sharks, were used in the experiments."

Of endless variety are the other devices and types of equipment which are each day saving the lives of countless seamen and aviators who have been fortunate enough to get away from their ship or plane before she foundered. For example, H. G. Morner, who was one of the originators of the life saving suit, has recently devised a buoyant "Abandon Ship Kit." Large enough to hold medical supplies, cigarettes and other small objects, yet small enough to be swung over the shoulder, it is a bright-orange-yellow color and hence is quickly visible when floating on the surface.

There are first aid kits of every conceivable size and type, and all of them must measure up to the Coast Guard's rigid standards. Not only do these kits contain the latest types of approved drugs and dressings but, what is more important, the cases themselves are absolutely watertight. The law specifies that such kits shall "maintain their water-tightness when submerged at least 1 foot deep in water maintained at approximately 70° F. for a period of 2 hours."

Never has the matter of life jacket design and construction been more important than it is today. Of particular interest to the wartime mariner is a report from a recent issue of *The Journal of the American Medical Association* which advocates the use of longer life jackets to cover the abdomen as well as the chest. It is pointed out that one of the new hazards of war is the blasts from depth bombs.

In addition to the life preserver "clip-on" lights which have been described in recent issues of YACHTING are a wide variety of lights which can be used in the water or in the life boat or life raft. One such device is the Wakefield "Man Overboard" lantern.

Another such product is the Emergency Light Corporation's Hulst Automatic Marine Emergency Light Unit, which has already been credited with saving many human lives. Approximately 9" by 6", and weighing but five pounds, it is a self-actuated lighting unit and lights automatically on any interruption of the normal lighting circuit.

The calcium water light, long a standby of the yachtsman, is one of the first victims of the new wartime safety at sea regulations. A recent ruling specifies that all such lights shall be removed from both ocean and coast-

Long before there was a War-
STEWART-WARNER INSTRUMENTS
were used by the U.S. NAVY

And today—in a thousand and one "tight spots"—these dependable precision instruments are proving their worth! Among the craft using Stewart-Warner instruments in government service are aircraft tenders, landing boats, tank lighters, patrol boats, crash boats, rearmament boats, quartermaster corps boats, picket boats, ship-to-shore boats, and aircraft rescue boats.

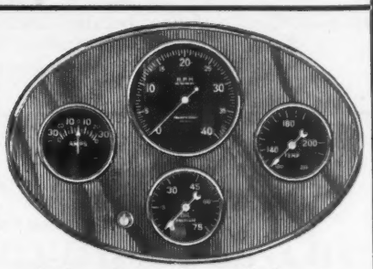
Precision-Built for Accuracy in Action!

Dial markings, white on black; black enamel bezel; oil gauge, ammeter, tachometer.

"THE MATE"
Designed for short, narrow instrument boards, as in light cruisers, runabouts and other small craft. Size: 11 29/32" by 4 29/32"; flush-type mounting; indirect lighting.

"THE COMMANDER"
This is the panel with all electrical instruments. Electric sending units for gauges and tachometer generate current required to operate instruments. Overall length, 7"; height, 6¼". Mounted from rear of board. Indirect lighting. Dial markings, white on black; white pointer has red tip.

"THE ADMIRAL"
Available for either gasoline or Diesel engines; special fuel oil pressure gauge optional for Diesels. Size: 11⅛" by 7⅜"; mounted from front of board; indirect lighting. Straight-out connection on tachometers unless elbow specified.



Dial markings, white on black; instrument selection optional.

ELECTRIC TACHOMETER
To be mounted independently in wood or metal instrument board; your choice of many face readings. Diameter, 4 5/16".

MAGNETIC TACHOMETER
Has jewel-supported pointer staffs, pre-aged magnets, temperature compensators. Built for accuracy under severest use.

Ignition switches available if desired; dial markings white on black.

"THE MASTER"
Ideal for twin-screw installations, with two complete sets of instruments: tachometers, ammeters, oil pressure and water temperature gauges. Size: 14 15/16" by 7⅛"; indirect lighting. Engine-turned, mahogany, or black wrinkle finish.

AMMETER **OIL PRESSURE** **TEMPERATURE**

These accurate mechanical gauges for independent mounting have the same high quality precision mechanisms used in gauges supplied with Stewart-Warner Instrument Panels. *Electric temperature and oil gauges also available.*

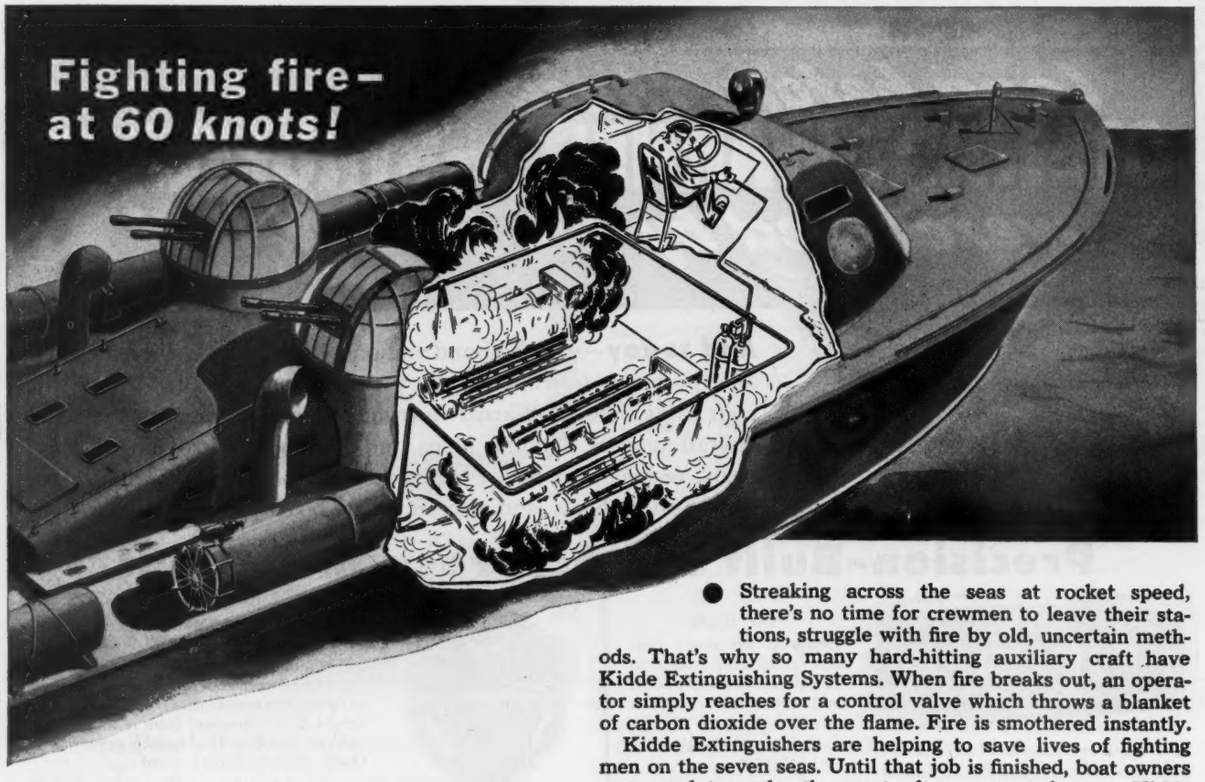
Use This *FREE* Catalog as Your Handbook of All That's Newest in Marine Instruments

Write today for your FREE copy of this complete new catalog of Stewart-Warner Marine Instruments. It contains a wealth of information you'll want to keep at your fingertips. It's yours for the asking. Write us, on your letterhead, today!

STEWART-WARNER

1837 Diversey Parkway **Chicago, Illinois**

Another Product of STEWART WARNER



● Streaking across the seas at rocket speed, there's no time for crewmen to leave their stations, struggle with fire by old, uncertain methods. That's why so many hard-hitting auxiliary craft have Kidde Extinguishing Systems. When fire breaks out, an operator simply reaches for a control valve which throws a blanket of carbon dioxide over the flame. Fire is smothered instantly.

Kidde Extinguishers are helping to save lives of fighting men on the seven seas. Until that job is finished, boat owners are urged to make the most of present equipment. Kidde representatives and boat builders are ready to help.

Kidde portable and built-in systems were formerly known by the trade name "LUX."

Walter Kidde & Company
Incorporated
652 Main Street Belleville, N. J.

wise vessels for the reason that "calcium type water lights have proved to be a hazard during wartime inasmuch as they cause serious fires by igniting oil sprayed on the ship or floating on the water."

Merchant seamen are going to carry mirrors with them for the duration of the war. As a matter of fact, room is to be made in the stowage space of life boats for two mirrors just in case the men forget to bring any along when their ships are torpedoed. The new regulation came about because some survivors of a torpedoed vessel fastened a flattened tin can to the blade of an oar. The sun, reflected by the tin, caught the attention of a passing vessel, which promptly came to the rescue and picked the men up.

The main problem of all survivors is stretching food and water rations to the limit. The Coast Guard has found out from rescued seamen what changes in such rations are advisable, and research covering the entire subject of the amount, packing and nature of food rations is now going on.

The water problem is far more serious than that of food. It is possible for survivors to live approximately three weeks without food, but without water chances for survival are limited. Besides emphasizing the necessity of constantly testing and renewing the ten quarts of water per person that life boats are now required to carry, this book tells survivors how to get more water when their supply is exhausted.

When all supplies of food and water were gone, survivors used to be thrown entirely upon their own resources, their lives depending upon their own ingenuity. Now that they are provided with this new safety book, they will find suggestions and guides for any and every situation that may arise. If they are forced to fish for food, they will find in the guide a list of what fish are edible when raw and what parts of the fish should be thrown away. It has been found that when fish are eaten raw the moisture in the flesh helps to quench thirst and add to the body's water content. Incidentally, every life boat is now equipped with a complete fishing kit.

The appendix of this Coast Guard publication, entitled *Hints*, is a veritable treasure chest for the shipwrecked sailor. It includes not only helpful suggestions regarding first aid, seamanship and what to do in uninhabited areas, but also mentions many practices which can be advantageously adopted by the yachtsman. For example, it points out that "difficulties have been experienced by survivors in life boats in readily determining the position of the blade of the oar in the darkness. Consequently, it has been suggested that a flat place be planed on the loom of the oar near the handle to run parallel with the blade so that the position of the blade relative to the handle can be readily determined by touch."

PT'S IN ACTION

(Continued from page 25)

Finally, early the second morning — one of those brilliantly sparkling mornings — our stars worked out to put Midway a little off our starboard bow and, wonder of wonders, four Grumman fighters showed up from that direction and buzzed the daylights out of us. Then the towers from the island showed up just where they should have been — the island seemed to be nothing but towers and water tanks, at first — and finally we were heading into the lagoon in an impressively long column and then milling around the dock as we nested the boats alongside.

Midway was a much pleasanter place than we'd expected. Anything with a shower and hospitable marines with an extra bottle or two of beer seemed pretty darn good. We'd been there all of two hours and were just getting friendly with the goney birds and comfortable over some year-old magazines, when we heard a whistle blow somewhere. "Ah, lunch" we thought. But a mess attendant appeared and eyed us a moment and said: "In case you gentlemens don't know it, that's that old sorrowful whistle." And then began a routine that got to be pretty familiar the next few weeks. Grab a truck, screech around a few corners, jump into your boat and get the hell away from the dock, manning machine guns while you circled around the lagoon. Midway was getting fed up being the target for stray Jap subs and cruisers to lob shells into, and for airplanes to drop bombs on. That was why we'd been sent there. We were Midway's Navy. The gunners had that itchy, yearning, look that they seem to get when there's a prospect of something to pop at. But nothing materialized.

Finally, on the 3rd of June, and in the middle of a big soft ball game in the sand near the dock, the scuttle butt began to fly. "Jap fleet spotted, carriers, battlewagons, transports, headed this way." Who won the ball game got a bit less important. Our hot dope artist was working overtime but this time he seemed to be right. Two boats were ordered out to a patrol station to the west, and they got under way on the double, opened up wide. They were to be our scouts, just in case.

That night we all moored out in the lagoon, scattered, so as not to make too good a target. And, sure enough, at about 5:30 next morning, the old sorrowful whistle started again. We were all under way in extra fast time, circling around leaving expectant trails of white wake behind us. Suddenly someone spotted what looked like a funny cloud, 'way off to the

On the seven seas these standard Chris-Craft Serve the U. S. Armies

IN ICELAND, in the African theatre, in the Solomons, wherever U. S. Army operations require boats, you'll invariably find 60-ft. standard Chris-Craft transporting Army personnel.

In the acid test of war, these sturdy Chris-Craft, with no changes in hull design or construction, with added equipment and carrying capacity, have come through with colors flying.

In service months before Pearl Harbor, the U. S. Army have ordered and reordered these husky craft to meet constantly expanding Army needs. Today building 60-footers for the Army is one of our important war assignments. We're proud of the performance record of all Chris-Craft in service. Proud of the privilege of co-operating with the Army, Navy and Coast Guard in building boats for Victory.

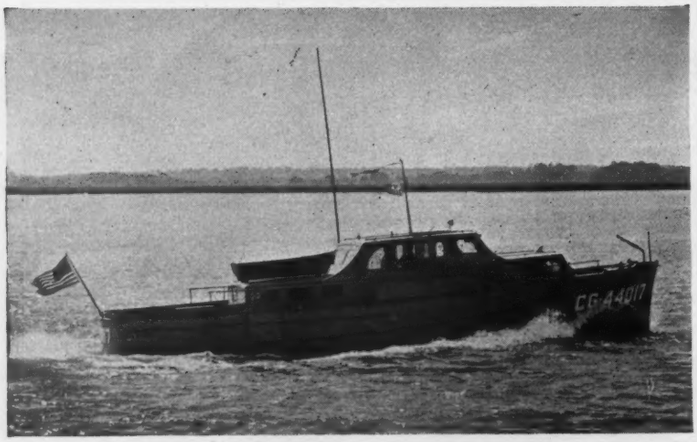
ARMY (E) NAVY

We proudly fly the Army-Navy "E" at all three Chris-Craft Factories

☆ ☆ ☆ CHRIS-CRAFT ☆ ☆ ☆

CHRIS-CRAFT CORPORATION, Detroit Road, Algonac, Michigan

WORLD'S LARGEST BUILDERS OF MOTOR BOATS



BURGER BOATS
GUARD AMERICAN WATERWAYS

Burger-built for pleasure, this boat — and others like her — have "joined up" and are now helping defend America's harbors, rivers, lakes, and coastal waters against enemy action.

Your war bonds are helping send Burger-built subchasers and mine sweepers on their way to active service — and helping you save for your new Burger yacht.

BURGER BOAT COMPANY
MANITOWOC · WISCONSIN

Radiotelephones
For Every
Marine Need!
Hallicrafters Radiotelephones are designed to meet every marine need ...engineered by the world's largest exclusive manufacturer of short wave radio communications equipment.
hallicrafters
Chicago, U.S.A.

northwest. Taking the glasses, our cloud turned into the damndest big bunch of airplanes I'd ever remembered seeing. And so quiet and peaceful, lazily coming around into the sun. Our own marine planes had all taken off and disappeared, and realizing that this armada was all Japs made us feel a bit lonely. Slowly, so slowly, they circled into the sun, and then three groups detached themselves and headed, still so leisurely, toward the islands. Then one gun from the shore whammed behind us; one puff in the sky ahead of the leading wave to get the range, and then all hell broke loose at once.

The shooting the marines were putting up was magnificent. Bursts seemed to be coming from the middle of the formation. Suddenly one bomber showed a plume of flame. Tremendous cheers! But the plane kept coming. The flame disappeared as we watched. Then it disintegrated in mid-air, a violent ball of fire. The others just closed up and kept coming through that crowd of bursts. As the plane fell, we could see something fall clear; a man, we thought. But, as we watched, fascinated, it developed tail vanes. Suddenly we snapped out of it: up speed, helm over. The bomb, after a moment of uncertainty, arced away a little — so it was going to miss. It hit the water to one side with a sheet of fire, and we felt the terrific concussion that shocks and numbs you with its force. The plane hit clear of us on the other side and, as we realized we were still whole, we found ourselves looking at the hail of shrapnel in the water and on deck around us with wonder. Two of the gunners, with a sheepish and startled look, put their helmets back on. They'd thrown them off so they could see better!

The show was over. It was pretty real from then on. Bombs were thumping on the island. Tremendous blasts of fire were bursting up from where they hit. Out of the sun was coming an endless stream of dive bombers. As they unloaded on the island, they'd start the most amazing display of acrobatics, strafing everything in sight. The islands were putting up a magnificent barrage and our "fifties" out in the lagoon were contributing to the din. Zeros now seemed to be everywhere. Time after time they'd start runs on our boats — but they didn't seem to like our tracers smacking by them and they'd pull up. One Zero came down on his back, crashing, we were sure, but he pulled out, firing as he came, in a kind of snap roll, and raked one of our boats from stern to stern, putting about thirty .25 caliber and cannon holes into her, starting a fire in the forward compartment. The people in the boat swear they could have knocked him down with a boathook, he was so low. Three men hit, not one seriously!

We saw three of our own planes in the melee. One Wildcat came streaking in low over the lagoon with three Zeros after him; when the Zeros ran into our .50 caliber fire they all pulled off. The Wildcat got down, badly damaged, pilot wounded, with all his ammunition gone. A Buffalo came down in a dive just outside the reef with two Zeros after him. He never pulled out but his parachute blossomed just in time. The Zeros dove the spot a few times while we watched, too far away to do anything. They found the pilot's body two days later, riddled with bullets.

Finally it was over and our planes, what there were left of them, began to come in, crippled, some landing on one wheel or with flaps shot up or control columns shot away, or with wounded pilots or dead gunners. There were pitifully few left of the ones that had gone off to bomb or torpedo the Jap carriers or intercept the Jap air armada. Jap casualties? We'd seen quite a few fall and a great many more limping off, apparently badly damaged. Our own pilots coming back said there was a highway of these that had crashed on the way back to their carriers.

We were still pretty busy. Three of the boats went back alongside the dock to put men ashore to help get the fires on the island under control. Clark Faulkner and Jud Callaghan (his father was Rear Admiral Callaghan, of the *San Francisco*) spent the rest of the morning pulling hand grenades and burning ammunition out of the blazing hangar, and Lt. McKellar and three of the boys off his boat were trying to get to a big oil fire. The rest of the boats were chasing around in and out of the lagoon, fishing crashed aviators out of the water. We got seven of them, mostly from planes that hadn't quite been able to make the field.

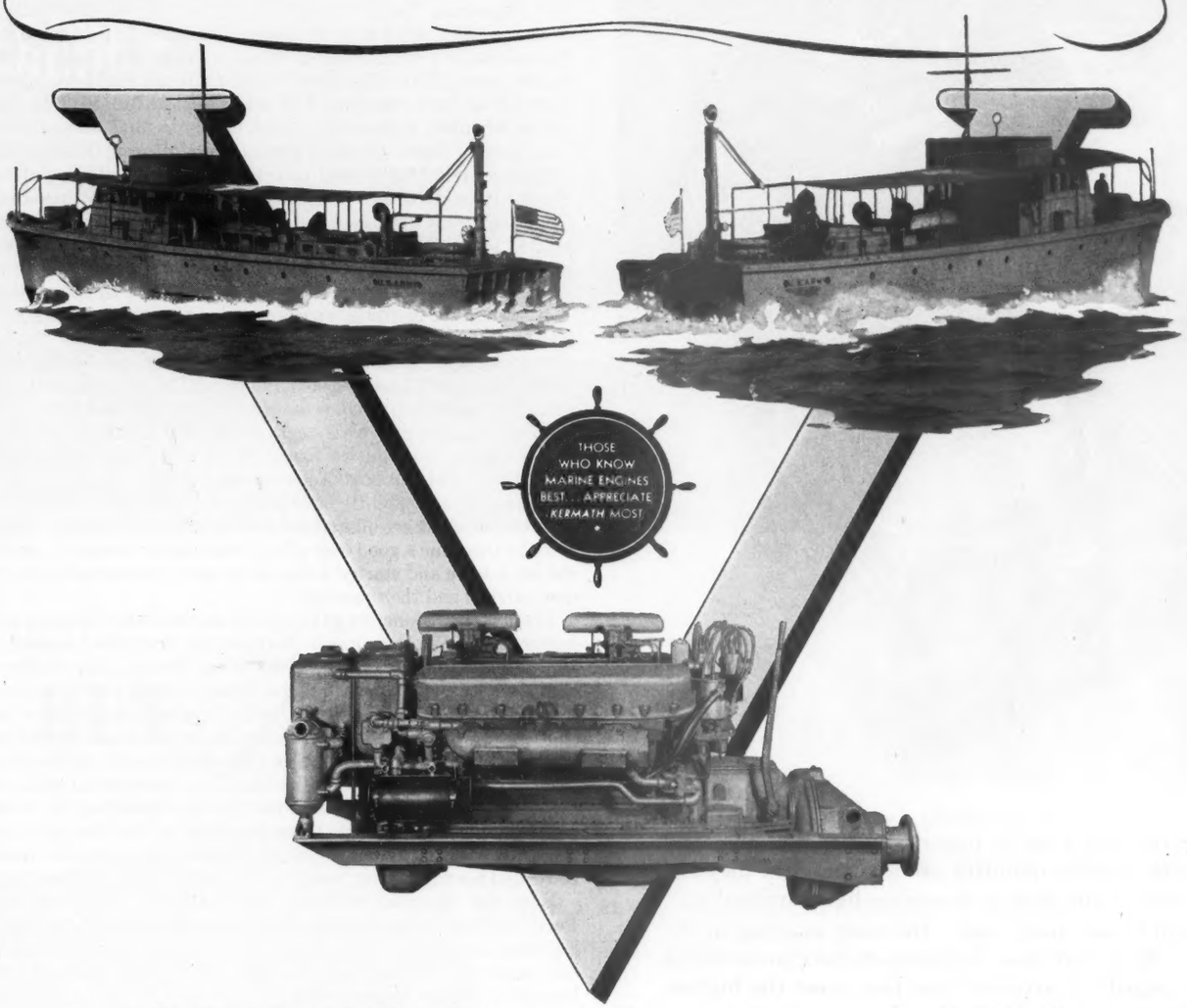
That afternoon we spent a couple of hours salvaging personal gear, guns and confidential matter out of one of our dive bombers that was sunk in about 20 feet of water, using our shallow water diving apparatus and being interrupted once by another air raid alarm which turned out to be some B-17's coming in. We all were pretty hungry and a little done in when we got back to the dock but Lt. McKellar had found a big five-gallon bucket of fresh milk. Lord knows where. That milk did wonders and we were beginning to feel a bit better when the word came down from the C. P. that we were to take aboard extra drums of gas and get ready to get under way.

It didn't take long. By the time we had the drums aboard and lashed down, a messenger had come down with the dope. We were to get under way at sunset and head out to make an attack on Jap ships distant 170 miles, bearing 342°. There weren't any particulars, just that that's where they were and that one or two were burning, so that we should be able to find them all right.

I guess we all felt pretty much the same way the next half hour. The

104' ARMY OFFSHORE RESCUE VESSELS

Built by Casey . . . Powered by Kermath



● The Casey Boat Building Company of Fairhaven, Massachusetts, with their long and varied experience in producing fine boats, are now building these staunch, seaworthy Army Aircraft Rescue Boats for offshore duty in America's expanding zones of action.

Powered with three Sea-Raider, special V-12, all marine engines totalling 1650 horsepower, each boat is provided with a husky, rugged, thoroughly dependable source of power that gives an excellent account of itself when speed, superior performance, and split-second action insure the saving of American lives.

These stoutly built sea retrievers, with their brilliantly performing Kermath power plants, are aiding in an effort which some day will be channeled into victory and peace. The reputation Kermath is maintaining for providing fine marine engines for all branches of our fighting forces is thoroughgoing evidence that—"*Those who know marine engines best appreciate Kermath most.*"

KERMATH MANUFACTURING COMPANY
5893 Commonwealth Ave., Detroit, Mich.

☆ KERMATH ☆
A Kermath Always Runs

GASOLINE AND DIESEL ENGINES ••• — 25 TO 550 HORSEPOWER

U.S.A. NOW BUILDING MARINE CHRONOMETERS

—that surpass any the old world ever produced!

▶ For the first time in history, marine chronometers are being built in quantity production. And they are being built right here in America—by Hamilton!

Naval Observatory tests—the most exacting in the world—show that these American-made chronometers are so incredibly accurate that they meet the highest specifications of the U. S. Navy!

Besides precision chronometers, Hamilton is also supplying our Navy with highly accurate chronometer watches, master navigation watches, comparing watches and other precision timepieces.

These quality timing instruments will be available after the war—priced within the reach of yachtsmen. They will carry forward the high standards of accuracy which, in peace and war, have made the Hamilton name famous in watchmaking for 50 years.

HAMILTON

The Makers of the Watch of Railroad Accuracy

A NEW NAME IN NAVIGATION

way we figured, by the time we'd found them and got in position for an attack without giving our own presence away, it would be pretty close to dawn. We'd done that sort of thing on practice, and we knew most of us would be able to get in all right and that we could raise some hell with our torpedoes, but I don't think any of us expected to get back out through the screen again; if we did, we figured on being pretty easy meat for the Jap planes at daylight. No one knew then of the sorry condition in which our own carrier based aircraft had left the Jap carriers, we only knew vaguely that one of our own task forces was somewhere around.

So, just before we shoved off, there was an unusual amount of handshaking going around. I suddenly realized that I was just plum scared. I'd never felt that way before, but there it was. But when we got under way it evaporated under the familiar routine of taking station, keeping it, and trying to keep the engines running through all the water that our gas tanks had picked up.

It was black as a hat as we stood off the reef, but we could keep station on each other's wakes without too much difficulty. Back at Midway, the oil fire was still burning fiercely and we could see it for a long way but pretty soon that was gone. The ocean seemed full; we were challenged a couple of times, apparently by our own subs, and we saw flares or Very stars once or twice, probably coming from aviators down in rubber boats though we didn't have time to investigate. As our fuel dropped, we siphoned the gas from the drums into our tanks and hove the drums over the side. We didn't want any loose gas drums on deck to invite trouble if bullets started to fly. We were all having plenty of trouble with the water in the gas. Our auxiliary generator was already "on the fritz" and our batteries were getting low. The formation opened up but we all knew what to do.

By two in the morning, we were getting near the contact area. All hands were topside straining into the dark, and the moon had just come up as a crescent. We felt an elation; it was a perfect night for this sort of work. Torpedoes were all set, checked and rechecked. At 3:00, nothing had been seen. The boats scattered, some west, some east, and some of us keeping on along the bearing we'd been given. Still nothing, out to 240 miles. Dawn filtered up, and we found ourselves chasing smoke which disappeared. Some of the boats came across a great area of oil and wreckage, nothing more. Apparently our burning ship had sunk (she had; one of our subs had finished her off and the rest of the fleet had reversed course and were by this time a good way off and running for home). Three of the boats did see a force and started a run on it, but it turned out to be two of our own carriers and their escorts.

Finally, one by one, we gave up and started home. It was a pretty sorry homecoming. We were much disappointed, for it had seemed an opportunity made to order. But, just for a last flurry, a Jap cruiser plane ran across two of the boats heading back and, coming out of the sun, dropped a bomb that all but lifted the fantail of one boat out of water before they spotted him. He circled for another run and the boats opened up on him. He must have been hit because he turned and beat it, jettisoning his other bomb a couple of miles away. By that night we were all back at the dock and the battle of Midway was over for our squadron. We were a disappointed bunch, particularly when they told us that the Jap support force had been within 60 miles of the island that night, close to where our two boats had been before our sortie to the north. That's the way it goes.

Now, the squadron is pretty well scattered. The boats returned to Pearl and four of them got from there to the South Pacific on their own bottoms, a neat trick for anyone's 77-foot speed boat, let alone boats that had taken the beating that ours have. On the way down, Lt. John Rice brought in Eddie Rickenbacker.

Clark Faulkner is now in the Solomons torpedoing Japs, and has a cruiser and a destroyer to his credit. That's where the PT boats are really proving their worth now. Lt. Bulkeley's Philippine saga set the pace, and the boys in the boats off Guadalcanal are really keeping it up. Tales of small handfuls of boats out stopping the Tokyo Express, with no regard for their own lives, seem to be routine.

We've heard snatches: of three PT's against four Jap destroyers in formation, one PT each singling out one destroyer and going into attack. Result, two Jap destroyers crippled and probably sunk, and two PT's lost, three men missing. Of hits on cruisers in single-handed attacks from 500 yards; many hits on destroyers. One night alone, five boats making contact with fifteen to twenty Jap destroyers and light cruisers escorted by six planes, and being bombed, strafed and shelled with everything available. Of three boats trapped along the Guadalcanal shore by twelve circling destroyers, resulting in one boat lost with only one survivor picked up the next day in bad shape; one fighting its way through, firing two "fish" at each of two destroyers, one destroyer being hit twice; and the third boat getting out of the trap in a rainsquall. Of two crew members of another boat that night towing their badly burned skipper for nine hours in the water, warding off sharks until they were picked up at daylight. But that's another story we'll all know more about some time.

The point is, these Elco PTs are showing what they're built for. They're not toys now, they're really fighting a war!

Yesterday... and Many a Glorious Tomorrow

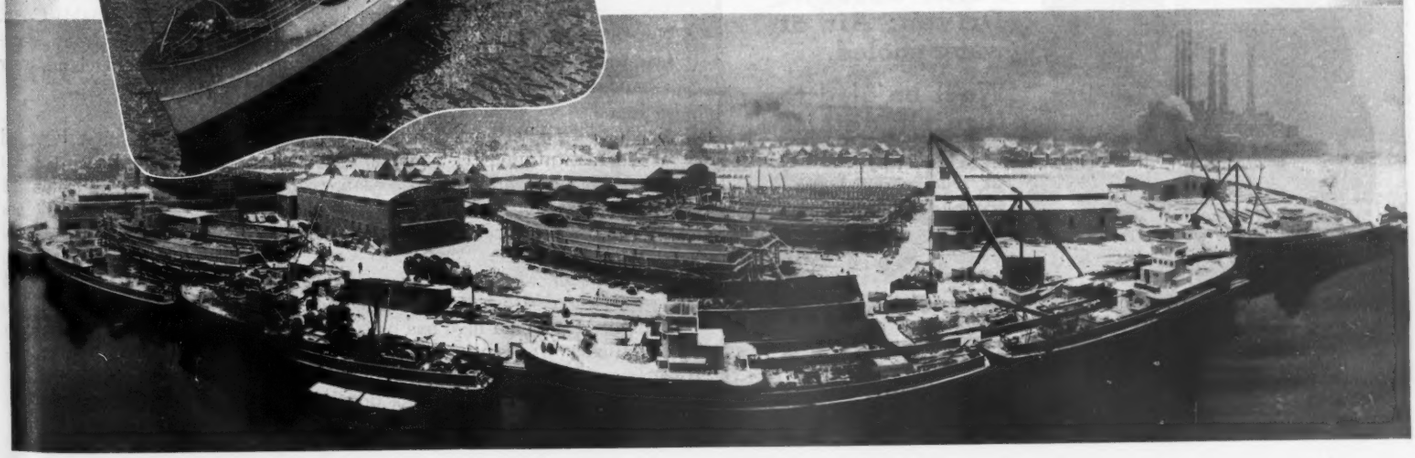
ALL of us, probably, feel the same way — that the waters were intended for boats like these. And this time of year we feel it pretty keenly. Those happy, carefree days shall come again — with even finer GREBE-built beauties awaiting you.

BUT *Today...* WITH ALL OUR MIGHT...

WE are building for the Navy — building for Victory — devoting all our energy to supplying the needs of our nation at war. Our enlarged facilities and fine craftsmanship will offer yachtsmen a finer boat for the peace that follows.

HENRY C. GREBE & CO., INC.

3250 North Washtenaw Ave., Chicago, Ill.



HOW MANY

?

HOW LONG

How MANY of our subchasers are taking part in the war today? How many more will we build before we can start on your new peacetime cruiser? We can't tell you that — now — but we do know that the faster we produce subchasers and the faster you buy War Bonds, the sooner you'll be able to stop at Elizabeth City for your new boat.

We are looking forward to that day when we can help send you off on a vacation instead of giving you a ship to fight with.

Elizabeth City Shipyard

ELIZABETH CITY, NORTH CAROLINA

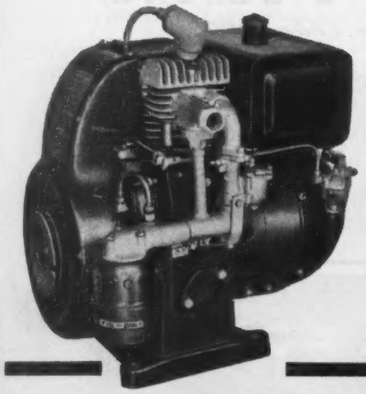
ONAN

★★★ ELECTRIC PLANTS ★★★

Doing a Winning Job in the War

ONAN ELECTRIC PLANTS are doing a winning job on all the Fighting Fronts by providing electricity for many vital war tasks.

Thousands of these reliable, sturdy Plants are now in production. Ratings from 350 to 35,000 watts; A.C. or D.C. or dual output; 50 to 800 cycles; 6 to 4000 volts; Gasoline Driven; Air or water cooled.



We'll be glad to furnish details on your present or post-war need for Electric Plants.

★★★★★★★★

D. W. ONAN & SONS

1443 Royalston Avenue ▪ Minneapolis, Minn.

News from Yachting Centers

FLORIDA TRADE WINDS

By Vivyan Hall

▶ Thirty-eight boats of the Engineer Amphibian Command have just finished a training cruise from Florida to Cape Cod in 38 days. The 50′ landing boats had been at winter quarters near Carabelle on the west coast. Of the 2170 miles up to Camp Edwards, the first 130 were in the open sea, some of it 50 miles from land. From Fort Myers they followed the cross-state canal to Stuart and then the inside route north. Near Fort Pierce, they passed the training base recently set up by the Navy's Amphibious Force, where landing operations are practiced with both Roebling alligator tanks and Higgins landing boats. In charge there is Captain Clarence Gulbranson, who directed the landing operations at Casablanca. Farther south the Navy is being trained in small boat sailing by Graham Biglow who has been active in ocean racing for the last twenty years. When Captain H. H. J. Benson, chief of staff of the Seventh Naval District, learned that there were a number of sailing dinghies in port on aircraft rescue boats, he ordered them into action. The dinghies are 9′6″ by 4′2″ and are practically the California Interclub One-Design Class. They carry a 55-foot loose footed Ratsey sail and dagger boards and are put out by the Miami Shipbuilding Corporation.

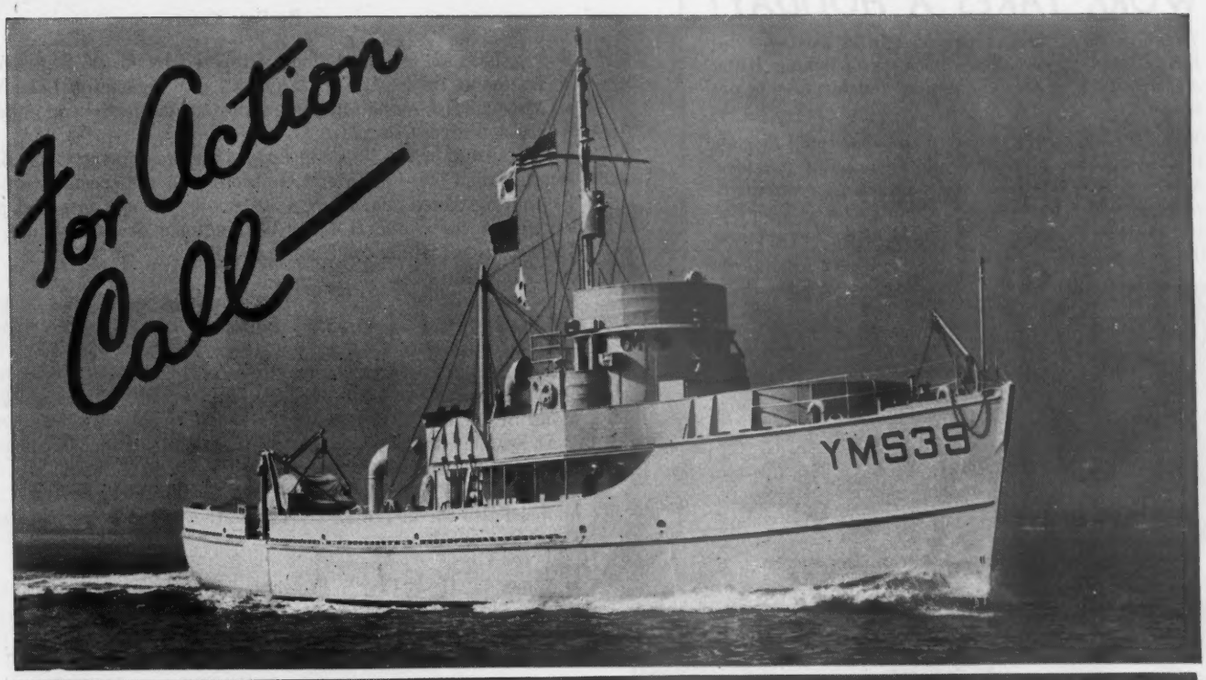
▶ At Jacksonville, the St. Johns River Shipbuilding Co. has launched its third Liberty ship, the *Francis Asbury*, and has received a contract for 55 additional Liberties. Farther up the river, the Palatka Shipbuilding Corp. is working day and night on landing barges and Coast Guard patrol boats. The yard, which was started in 1941, now employs over 200 men. At Panama City, the J. A. Jones Construction Co. delivered two Liberties in April and has received a contract for 57 more. The Tampa Shipbuilding Co. has delivered a second destroyer tender, U.S.S. *Sierra*, while maintaining its schedule of mine sweeper construction.

▶ "Common methods in fighting a common enemy" is the theme of the foreign instruction program at the Sub-Chaster Training School in Miami, where hundreds of officers and men from Brazil, Cuba and Peru are studying with other hundreds from our own Navy. In charge of the Brazilians, who were the first to come from South America, is Commander Harold Cox. Commodore Julio D. Arguelles came to receive the boats that were turned over to the Cuban naval contingent which was headed by Lt. Com. M. A. Perez Medina. Heading the Peruvian mission is Lt. Com. Jorge Barrito. These groups are all being trained aboard our SC's and PC's. In charge of the shakedown detail here has been Lt. Barklie Henry, whose yawl *Odyssey* is well known from Galapagos to Newfoundland. He has just been succeeded by Lt. Charles F. Havemeyer, former owner of the New York "32" *Apache*. In the same department are Henry Sears, of New York, and Dudley Sharp, of Houston.

▶ The fishing kits that are now being placed aboard lifeboats have been tested out in the Gulf Stream repeatedly. The idea of Gifford Pinchot, they have been worked up by Michael Lerner, S. Kip Farrington, Philip Wylie, Erl Roman and Captain Bill Hatch out of their practical knowledge and experience. Containing fishhooks, lines, lures, spear, bait and net in a compact roll, they have explicit directions for obtaining food and drink.

▶ Instead of holding the usual annual meeting at New Smyrna, Region 5 of the A.P.B.A. balloted by mail. Walter Engle, of Lakeland, is chairman; Russ J. Christy, of New Smyrna, vice chairman; Lynn S. Nichols, of West Palm Beach, secretary and treasurer. Directors are Samuel Crooks, of St. Petersburg, Robert Ikerd, of Miami, C. W. Larabee, of Bradenton, A. C. Rogers, of Jacksonville and Frank M. Sawyer, of Wethersfield, Conn. New officers at the St. Petersburg Y.C. include J. Shirley Gracy, commodore, Thomas S. Pierce, vice commodore, and Oscar Delano, rear commodore.

▶ The 75′ Diesel houseboat *Barbett* has been sold by John A. Coryell to the Institutum Divi Thomae, of Cincinnati and Palm Beach, and is being converted into a floating laboratory. The institute is a scientific development company which is working on the production of medicines from certain tropical animal and plant life. . . . Mrs. Jane Fisher has sold her Diesel yacht *San Jan* to A. S. Publicovar, of New York. . . . E. N. Park's 46′ Matthews cruiser *Elouise*, which he loaned to the Coast Guard last year, has been returned to him at Coconut Grove. . . . Dr. John T. Macdonald here has bought the 27′ auxiliary sloop *Osprey* from R. J. Richey, who is being transferred to the Pacific division by Pan American. . . . Lawrence Holloway, another Pan American pilot, brought one of the 23′ Pennant Class sloops down with him from Long Island Sound. With her three foot draft, *Clair* is well suited for Biscayne Bay.



CONKLIN

Phone: WAlker 5-7500

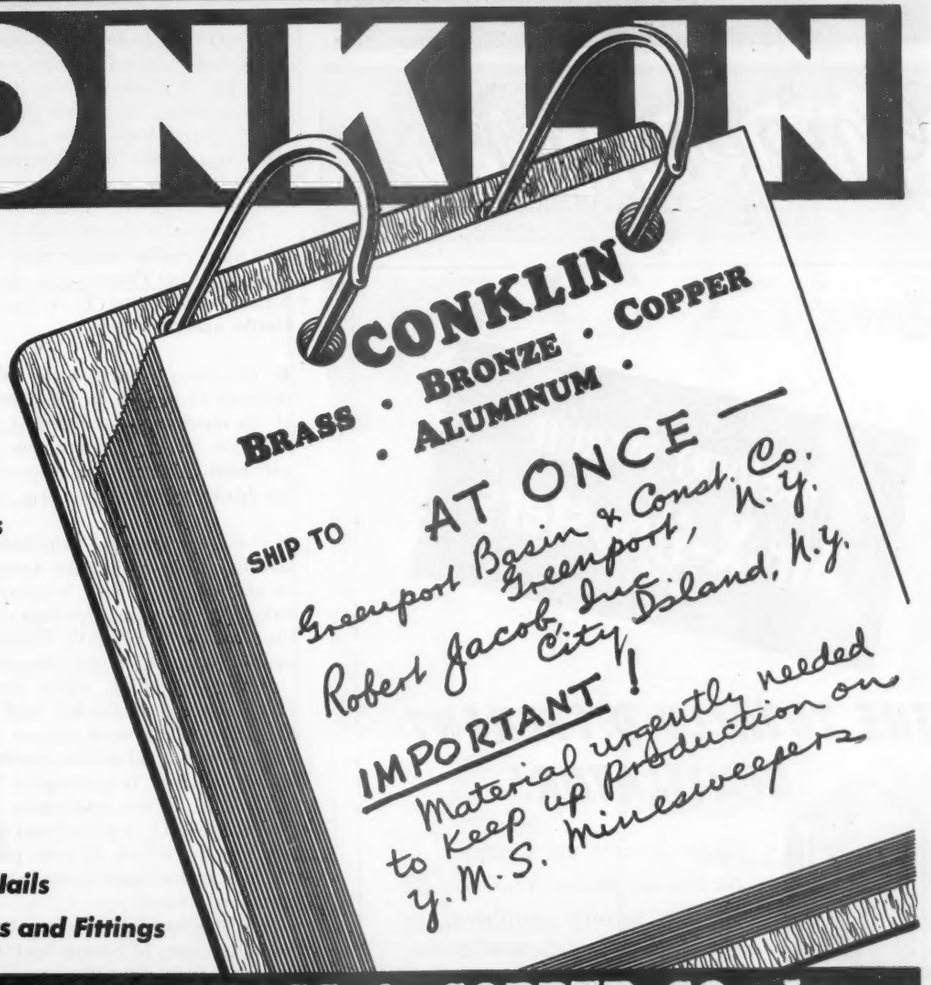
BRASS
BRONZE
and COPPER
In All Shapes and Sizes

•

ALUMINUM
Sheets and Rods

•

ACCESSORIES
Screws, Bolts, Nuts, Nails
Rivets, Burrs, Washers and Fittings



T. E. CONKLIN BRASS & COPPER CO., Inc.

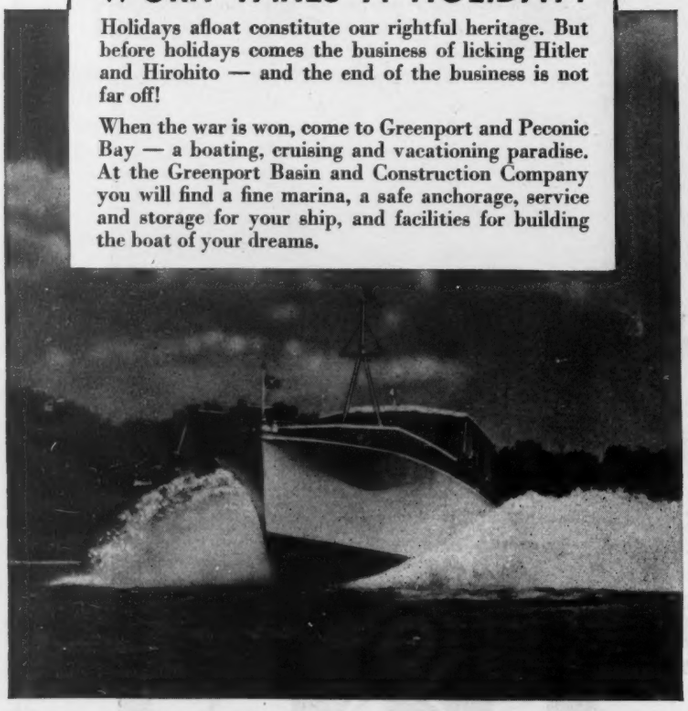
ESTABLISHED 1860

54-60 Lafayette Street New York, N. Y.

WORK TAKES A HOLIDAY!

Holidays afloat constitute our rightful heritage. But before holidays comes the business of licking Hitler and Hirohito — and the end of the business is not far off!

When the war is won, come to Greenport and Peconic Bay — a boating, cruising and vacationing paradise. At the Greenport Basin and Construction Company you will find a fine marina, a safe anchorage, service and storage for your ship, and facilities for building the boat of your dreams.



THE Greenport BASIN & CONSTRUCTION COMPANY Greenport, Long Island, N.Y.

NUMBER TWO IN A SERIES

BREIDERT MARINE Air-X-Hausters

THE TOTALLY DIFFERENT VENTILATOR!

Looks different and is different... the Breidert Marine Air-X-Hauster provides positive ventilation no matter which way the wind blows, with no fans...no moving parts...no adjustments. Installed above deck or on portholes, it succeeds where other ventilators fail! For free book, write to Department F.
G. C. Breidert Co., 634 South Spring St., Los Angeles.

"Ask for a free demonstration too!"

PACIFIC NORTHWEST CAT'S-PAWS

By Ray Krantz

▶ *Angelica*, 52′ auxiliary sloop skippered by C. W. Stimson, won over all honors at the Seattle Y.C. opening day regatta on Lake Washington on May 2nd. In taking top honors, she automatically won in her class (the A Division) over *Oscar IV*.

Phil Aaron, in the 33′ sloop *Lady Alice*, was first in Class B, and Tony Jensen sailed *Oslo*, Six-Metre, to victory in the special sloop class. Col. F. Andrews sailed *Sea Witch*, a 30′ auxiliary sloop, into first place in the Class C event, while Holding Withington's *Scorpio* wound up first in Class D. Ideal sailing conditions prevailed.

▶ Speaking of sail yachts: N. D. Showalter, Seattle, has bought *Zombie*, 34′ auxiliary sloop with 25 hp. Kermath, from Theodore Snoddy, of the same city; *Zombie* was built by Morris Brothers' yard at Everett. Arne Vesoja handled the transaction. He recently sold a 26′ sedan cruiser with Chrysler Crown to Louis Heiberg, Seattle, for Charles Jackson, Richmond Beach.

At Seattle, Roy W. Corbett, of Marina Mart, reports the sale of Otis Lamson's 24′ Blanchard knockabout *Vinta* to Edward Meyer, Seattle. Robert Eddy's Star was sold to Don C. Whitlock, Seattle. Corbett announced also the sale of Dr. E. H. Smith's 36′ Schertzer cruiser *Lorene* to Eric Moe, of Ellensburg.

▶ When O. H. ("Doc") Freeman bought the 45′ tug *Ruth* from the Pacific Fir Co., she looked like an "ex" vessel. However, Freeman saw good possibilities in her and, planning to operate her himself, put a great deal of care in her rejuvenation. In went a Chrysler Royal Eight, with 4.48:1 reduction gear, swinging a 38″ by 29″ propeller; hull and superstructure were completely gone over; all gear was overhauled; a new galley range was installed. In new paint, *Ruth* was a new tug. The new engine gave her 10 knots, running light. Officials of the Goodnews Bay Mining Co., operating far out to the westward of Alaska near the Kuskokwim River, found *Ruth* to be just the tug they needed for lightering tasks. They bought her from Freeman.

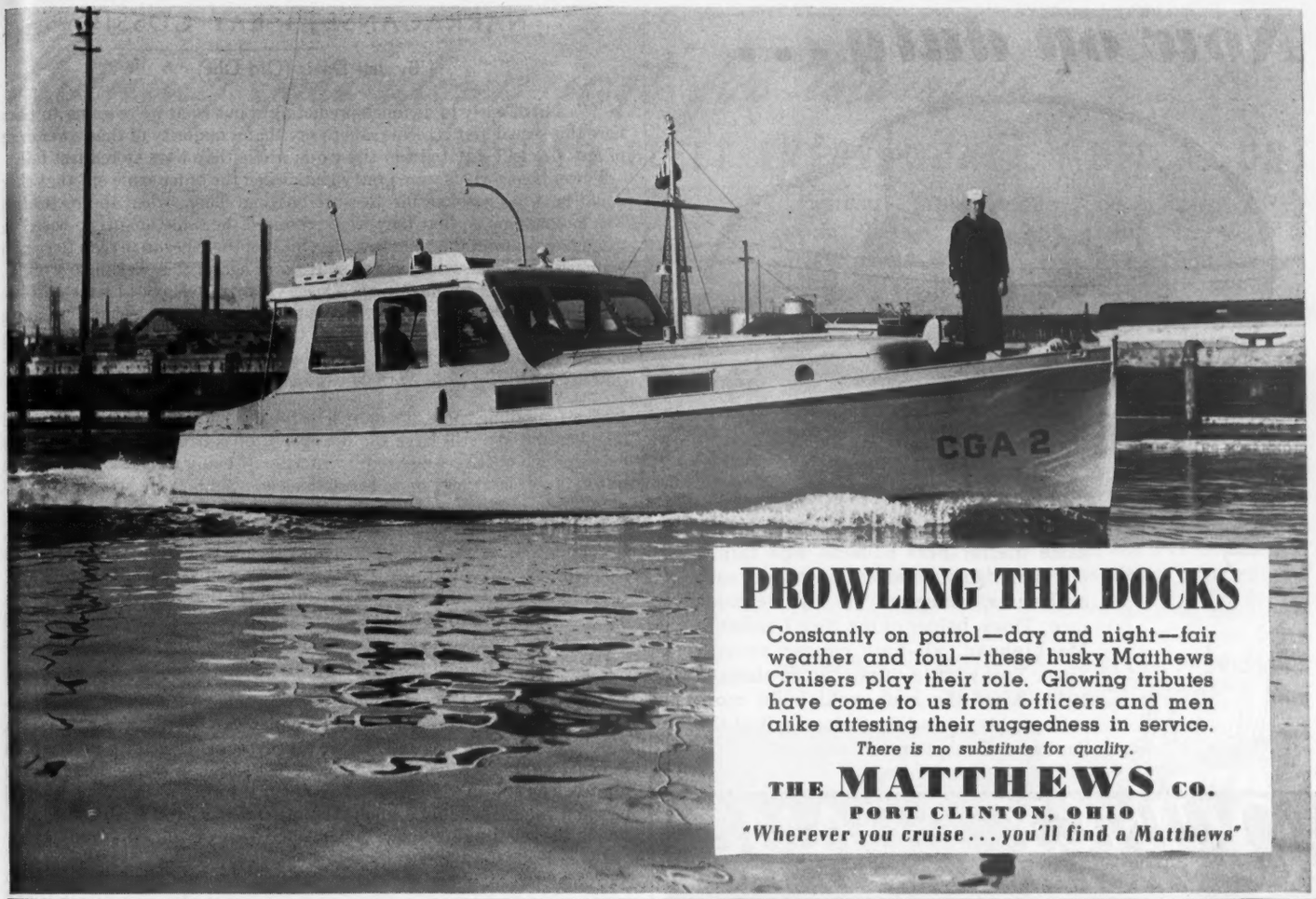
Freeman now has bought the 45′ harbor tug *Lewis II*, from Bellingham Tug and Barge Co. *Lewis II* is due to get the *Ruth* treatment.

Freeman also reports that J. J. Lohrer, Olympia, has bought *Skookum*, 28′ Grandy sedan cruiser from Don Russell, Seattle, through his Fremont Boat Market. *Tommy-Ann*, 26′ Lakewood cruiser with Chrysler Crown, formerly owned by T. A. Endres, Seattle, has been sold to Lawrence Gerde, also of Seattle.

▶ The Army is learning the value of a well organized small boat building industry at Seattle, in wartime. The Grandy Boat Co., Seattle, long one of the outstanding builders of small pleasure and work craft, is turning over new 36′ tunnel stern tugs of L. H. Coolidge design, to the War Department, at astounding speed. Similar work goes forward briskly at the Jensen Motor Boat Corp. yard, and at the Adams Boat Works.

▶ *Cat's-paw:* Sagstad Shipyards' La Conner plant is building a group of 203′ B.C.L. barges for the Army; Iver Nelson, well-known shipbuilder, is in charge. . . . Lloyd Nordstrom, Seattle, has bought through Tom Farrell the 42′ twin screw fast cruiser *Miss Boise*. . . . Vic Franck's Boat Co., and Jerry Bryant's Shipyard, both in Seattle, were completing a sizable fleet of 40′ motor launches for the War Department early in May. . . . Bill Tregoning, whose brother Jim operates the Tregoning Boat Co., Seattle, is associated with the Lake Union shipyard of Associated Shipbuilders; his work centers on the YMS mine sweepers. Bruce Richards is chief naval architect at the same plant. . . . Lieut.-Comdr. L. H. Hirschy, U.S.N., is in charge of YMS construction at Seattle for Supships, Navy. . . . It was interesting to observe Commodore Roy Raphael of the Seattle Y.C., a power boat man, sail his new command, the 35′ auxiliary cutter *Venture*, to *sixth* place in the race for Class B boats at the club's May 2nd opening day regatta; at that, he finished ahead of Malone Hutchins' *Truant*!

In a sale handled by Tom Farrell of Washington Boat Works, Capt. John Knepper, of Seattle and Kodiak, Alaska, recently bought the 33′ auxiliary sloop formerly owned by Phil Lewis, of Seattle. Farrell also reports several other pleasure boat sales, including the purchase of the 31′ cutter *Makua* from Louis Valbert, Seattle, by Leonard Petit, of the same city. Other Farrell sales: *Bamba*, 53′ pleasure craft, to the Whiz Fish Products Co., Seattle; *Jerry*, 36′ cruiser with Gray Six-71, to O. Joe Williams, of the Tacoma Y.C.; a Blanchard knockabout from Marie Bronson to John Fisher Reynolds, Seattle; *Salty*, a 34′ Monk-designed motor-sailer, to Dr. Earl Cilley, Bellingham; a new Owens 30′ 6″ cruiser to Dr. A. C. Jordan, Seattle; *Spunky*, a 31′ Chris-Craft twin screw cruiser, to Harry Lynn, of Kennewick; and *Soup*, a 30′ Grandy cruiser with 95 hp. Kermath, to Rod Darnell, of Juneau, Alaska.



PROWLING THE DOCKS

Constantly on patrol—day and night—fair weather and foul—these husky Matthews Cruisers play their role. Glowing tributes have come to us from officers and men alike attesting their ruggedness in service.

There is no substitute for quality.

THE **MATTHEWS** CO.
PORT CLINTON, OHIO
"Wherever you cruise . . . you'll find a Matthews"

TURNER'S

EXTEND GREETINGS AND A WELCOME TO THE NORTH CHANNEL AGAIN

Our lockers still carry a substantial supply of those delightful products skillfully fashioned by craftsmen from the rarer wools for which we have become famous.

Coats—Blankets

Knitwear—Sportswear

Established 1879
Turner's
LITTLE CURRENT
Manitoulin Island
ONTARIO, CANADA

INTERNATIONAL NEWS PHOTO

MARINE PRODUCTS
BILGE PUMP

Three series — 150 g.p.m. —at various head pressures —threaded pipe or hose connection . . . One series for small, compact, lower capacity and head requirements.

"BEACH BUSTERS"

Leave Guadalcanal for Well-earned Rest

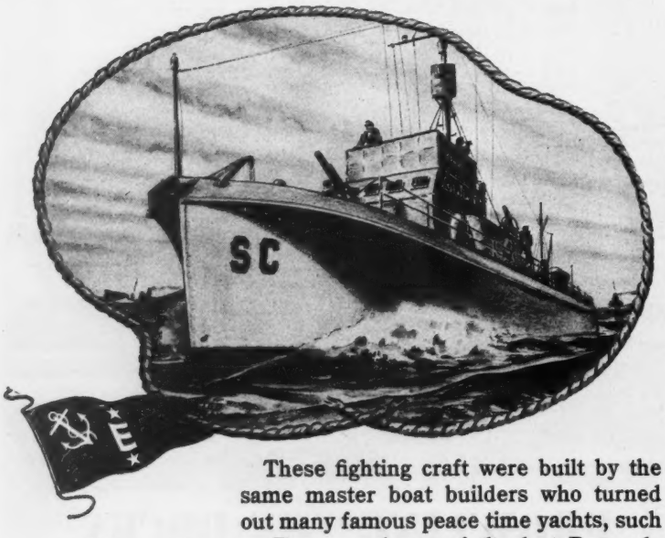
Their streamlined-flow, high-capacity bilge pump, however, won't be getting any rest. It's made to run continuously—wet or dry—positive prime—ready to pour its own weight every second—whenever needed.

MARINE PRODUCTS CO.

6636 CHARLEVOIX AVE. DETROIT, MICHIGAN

MARINE ENGINEERED EQUIPMENT

Now on duty . . .



These fighting craft were built by the same master boat builders who turned out many famous peace time yachts, such as Baruna, winner of the last Bermuda race; Tioga, holder of the New London to Marblehead, all-time course record; Tioga Too, with 18 "firsts" in 24 starts in 1939. After the war, we'll build more such yachts, including racing craft of the Yankee 1-Design and Adams class.

QUINCY ADAMS YACHT YARD INC.

STRENGTH & INTEGRITY through 101 years

Marine, fire, personal property insurance. Non-assessable, profit-participating. Consult your brokers.

ATLANTIC Mutual INSURANCE Company

49 WALL STREET · NEW YORK

ALBANY · BALTIMORE · BOSTON · CHICAGO · CLEVELAND · NEWARK · NEW HAVEN · PHILADELPHIA · PITTSBURGH · ROCHESTER

NARRAGANSETT BAY GOSSIP

By Jeff Davis (Old Doc)

▶ It's a little early to do much predicting about what we're going to have here this season but it seems safe to say that a majority of the power craft of any size will stay right in the yards where they were stored last fall.

Power boat owners were pretty glum when the order came out that they could have no gasoline for pleasure boating. Then, when the restriction was loosened up so that they were promised the same quantity, based on rated horse power, they had last year, most of them began to plan to go into commission. Then, when it was shut down again, they began to wonder.

Allowing boats enrolled in the Coast Guard Auxiliary to have gasoline for use only when they're operating under Coast Guard orders isn't going to induce many owners to put their boats overboard, neither is a ruling by the Providence section of OPA that any gasoline the owner had acquired "legally" before April 24 can be used for any purpose.

▶ For the sailing game, it's more hopeful although it's going to be a small boat season. We still have the upper half of Narragansett Bay and the whole of Mount Hope Bay to play in without many restrictions and we're not likely to have any more restrictions slapped on us if we behave ourselves and comply with those that we now have.

Although regattas at Newport and Jamestown are out of the question, courses can still be laid out for the East Greenwich, Bristol, Barrington and Coles River Y.C. and the Warwick C.C., as well as from Edgewood and Rhode Island Y.C. in the upper bay, it's likely that more than half of the regattas will be sailed in the upper bay as the Narrangansett Bay Y.A. will fill in the Saturdays and most of the Sundays not taken by clubs for their regattas, and sail them from the Rhode Island Y.C.

▶ Class C, (rating 17.1 to 22 under the Seawanhaka Rule) will be our largest class, made up of possibly three Triangles, two Herreshoff S boats and a couple of Atlantics. The Indians are also expected to make a pretty good showing although a good half of last year's Indian skippers are in the service. The swarm of Beetles will be about the same as last year. There'll be some Snipes, possibly a small class of Nationals, and a fair representation in the smaller Handicap Classes T and W.

▶ *Short ends.* . . . The Navy has established a bombing target on Ohio Ledge, the southerly mark for about every course from the Rhode Island and Edgewood Y.C. Maybe we can sell the Navy the idea of not having bombing practice Saturday afternoons and Sundays and the Fourth of July and Labor Day. Worth trying. . . . The Rhode Island Y.C. was the first to go into commission May 1st. Edgewood went into commission May 15th and celebrated it with a May breakfast (where did they get the eats?), a band concert, and a dance in the evening. The Barrington Y.C. planned to start the season May 15th, and East Greenwich May 30th. . . . Alden Walls has sold his Triangle Class sloop *Pandora* to Robert O. Loosley, who has changed her name to *Chetnik*, and has bought the Herreshoff S boat *Nina* from Frank L. Orr, of West Hartford, Conn. . . . Russell Boss has also bought an S boat, Reginald Reynolds' *Argument*, especially to race against Alden. Russ is the "racinest" skipper we have as this season he will sail his Indian Class *Wasp* in the Edgewood evening races Tuesday and Thursday nights, one of the Beetle cats in the Peppy Pappies' races Wednesday nights, and *Argument* in the Saturday and Sunday regattas, when he will let "some of the kids" handle *Wasp*. . . . Roger Hale, skipper of last year's Class T champion *Wetasse*, has bought John Gross's National *Gincrack* for his boy Ted. Ted, last year, sailed a child's size Swampscott dory, *Wetasse Jr.* . . . Frank Pettis, Jr., has sold the 47′ cruiser *Showboat*, ex-*Hoy Tark*, to Charles D. O'Connell, of Warwick, who has her documented for the coasting trade. . . . Stanley Ginalski is a dual job holder. From 3:30 to 11:30 p.m. five days a week he's a shipfitter, first class, at the Walsh-Kaiser shipyard at Field's Point. Mornings and on his days off, he's hard at work at his boat yard alongside of the Barrington Y.C., trying to get the few boats there which are to be in commission this year in trim for launching. . . . Charles Silverman has sold his 50′ cruiser *Virginia* to Roderick Smith, of Wickford, who plans to remodel her deck plan to convert her into a commercial fisherman. . . . Steve Kindelan, of Edgewood, has bought the Indian Class *Thunderjug* from Ralph Patten, a member of the Squantum, Mass., tribe. . . . Russell Boss has sold his Richardson cruiser *Ronbra* to Theodore Laramee, of Woonsocket. . . . John Richardson has sold his Indian Class *Dancing Feather* to Bart Curit, of Barrington. . . . Ronald Richardson's Beetle cat *Hornet* has been sold to Kenneth B. Dorr, of Edgewood. . . . And Tommy Hunt's Indian was sold to a Riverside buyer. . . . John Carr's 25′ Richardson *Roberta* has been sold to Stanley K. Grant, of Cranston. . . . Dick Wilson, supervisor of junior activities at the Edgewood Y.C., has bought the 26′ auxiliary cat boat *Penguin* from a member of the Quincy (Mass.) Y.C. . . . Carl Martin, steward at the Pawtuxet Athletic Club, has bought the 40′ raised deck boat *Salvager* from K. H. Broadus.

Nothing goes along just for the ride!

IN THE MOSQUITO FLEET EVERY OUNCE MUST COUNT

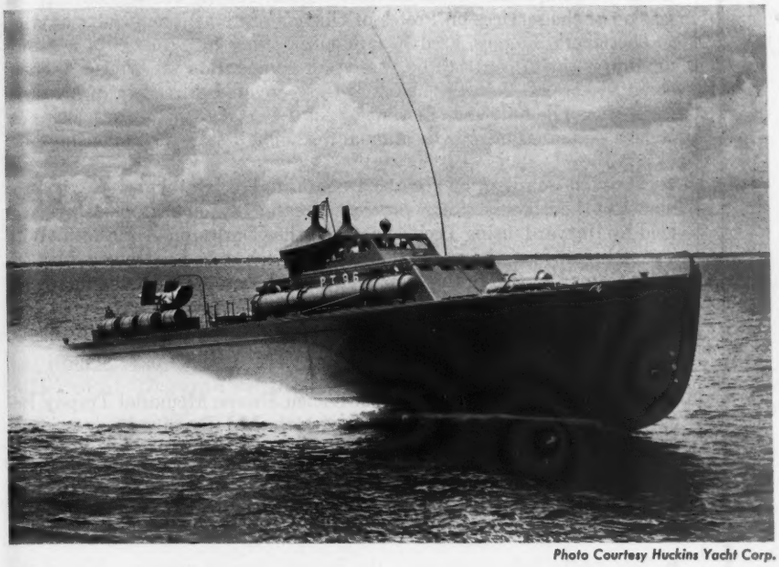


Photo Courtesy Huckins Yacht Corp.

Fighting PTs have sting and getaway. They swarm in close, hit the jackpot and high tail it to safety. That takes guts and speed and we are proud that the Danforth *saves weight* and contributes its bit to the maneuverability of these craft.

Huckins Endorses Danforth

Frank Pembroke Huckins, builder of the PT illustrated, writes:

"Having used Danforth Anchors with decided satisfaction on our peacetime boats and particularly on boats built for my own use, we are thoroughly in approval of using Danforths on our PTs and understand that they are proving entirely satisfactory."

PTs from the yards of every leading builder—

HUCKINS ▪ HIGGINS ▪ ELCO ▪ VOSPER
ARE DANFORTH EQUIPPED

DANFORTH IS NON-FOULING

The Danforth digs in with no parts projecting above ground to foul lines while ranging with the wind or tide. See your ship chandler . . . make your next anchor a Danforth.

Write for Folder with "HINTS ON ANCHORING"

R. S. DANFORTH
2121 Allston Way ▪ Berkeley, California

TWIN DISC
Yacht Gears

● Boat owners recognize the distinct advantages of modern high speed engines but at the same time, they often need the efficient performance of slower propeller speeds. By installing Twin Disc Marine Gears, you can have the advantages of both.

The new Twin Disc Yacht Gear

TWIN DISC CLUTCH COMPANY
1368 Racine Street, Racine, Wisconsin

Columbian
PROPELLERS

Designed for Service and Speed

When seas run high and the mission is vital, Columbian Propellers complete the run. Columbian Propellers and Fittings are famous for fine design, construction and finish.

COLUMBIAN BRONZE CORP.
Freeport, Long Island, N. Y.

★ *Sturdy for Heavy Duty*

Columbian Catalog on request. ★

FOR VICTORY BUY UNITED STATES WAR BONDS AND STAMPS

NAVIGATIONAL EQUIPMENT

for all types of vessels

●

KELVIN-WHITE CO.
90 State Street, Boston
38 Water Street, New York

For Freedom's Sake

BUY MORE **WAR BONDS** Now

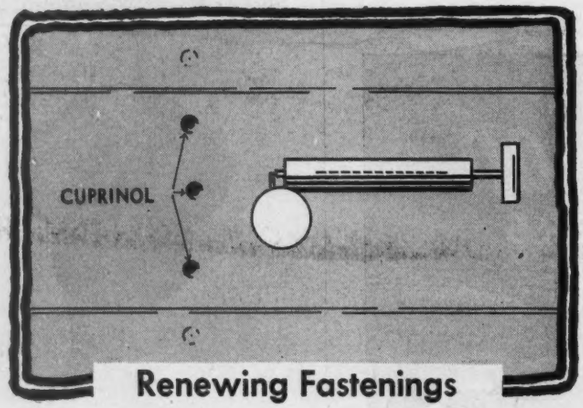
THEY GIVE THEIR **LIVES** YOU LEND YOUR **MONEY**

Our added facilities, for the construction of Army and Navy boats, will be at your service when the victorious peace is won.

COMPLETE SHIPYARD SERVICE
Marine Railways
Repairs — Storage
Expert Marine Power Plant Engineers

Distributors:
SCRIPPS MARINE ENGINES
WAUKESHA HESSELMAN OIL ENGINES
Sales and Service

WM. EDGAR JOHN and ASSOCIATES, Inc.
YACHT BUILDERS *and* ENGINEERS
MILTON POINT RYE NEW YORK



Renewing Fastenings

Watch out for Rot—old rot, and the chance for new rot to develop. Clean out the old rot and use a "Flit Gun" or atomizer to spray thoroughly all holes with Cuprinol before inserting new screws or bolts. Cuprinol gives protection against rot and permits a firm lasting grip to the fastenings in the wood.

If your supplier does not have Cuprinol available it is because the Federal Government has now placed it on priorities of A-10 and above.

CUPRINOL For Wood

CUPRINOL, Inc., 8 Spring Lane, Boston, Mass.

ON COLLEGE CHARTS

By Leonard M. Fowle

▶ The Inter-Collegiate Y.R.A. received another trophy for dinghy competition in April when the Northeastern University Y.C. gave the Association a perpetual prize for the semiannual Greater Boston Intercollegiate Dinghy Championship. The Rudolf O. Oberg Trophy was offered in appreciation of the services on Professor Oberg's retirement as faculty advisor.

The Oberg Trophy, a silver cup surmounted by a model of a sailing dinghy, is the fifteenth to be offered for competition sanctioned or sponsored by the I.C.Y.R.A. The list of these coveted prizes is growing quite impressive.The only major event of the I.C.Y.R.A. program which now lacks a perpetual prize is the annual freshman dinghy championship.

▶ The first competition for the Oberg Trophy, although it carries the names of the winners of four previous Greater Boston championships, was held by Harvard, using Tech's boats, on the Charles on April 25th. With a good breeze from the west, Harvard and Tech staged a struggle. Last fall these teams had tied in the same regatta and there was little to choose between them. It is a three-crew regatta. The final scores were: Harvard, 104; M.I.T., 101; Boston College and Northeastern, 79 each; Boston University, 55; and Tufts, 50.

▶ The previous day, in the annual Lucien Sharpe Memorial Trophy Regatta at Brown, postponed from April 11th, M.I.T. gained possession of another trophy. In whole sail winds from the southwest the Engineer sailors outscored five rivals with the Coast Guard furnishing the stiffest opposition. The team scores were: M.I.T., 58; Coast Guard, 52; Boston College, 46; Yale, 43; Brown, 37; and Worcester Tech, 22.

▶ Two weeks before upsetting the favored regular member clubs of the New England district in the Coast Guard Bowl, the Holy Cross skippers Tom Macdonald and Arthur Ogden had earned the right to enter the New London event by retaining the New England Associate Member Championship for the third straight time. In this regatta, sailed in M.I.T. dinghies under Boston College's colors, April 18th, Ogden and Macdonald scored 37 points each. Their greatest opposition came from Bowdoin, the newest of the Associate member clubs, with Leonard Sherman and Frank Oxnard doing good work for the Polar Bears. The team scores were: Holy Cross, 74; Bowdoin, 60; Boston College, 53; and Rhode Island State, 34.

▶ The I.C.Y.R.A.'s Middle Atlantic Associate Member Championship Trophy changed hands this spring when the Lehigh University Y.C. took it away from Drexel Tech, which had won the two previous title series. The spring competition was held April 24th under the Naval Academy's auspices on the Severn, and the Lehigh skippers, William Clark and Edward Shipley, won all the races, 24–15.

▶ Although a final decision has not been made, sentiment in the Inter-Collegiate Y.R.A. appears to favor a 1943 McMillan Cup series, possibly in the National 110 Class at Marblehead, during June. There also appears a good chance that the proposed Star championship will materialize.

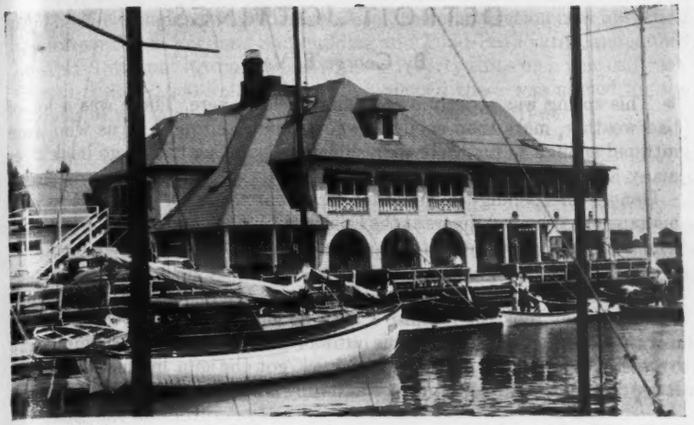
LAKE MICHIGAN BREEZES

By Warren T. Davis

▶ Col. Morrow Krumm, a member of The Anchorage and an ardent sailor, was killed in Iceland with Lt. Gen. Frank M. Andrews and twelve others while in an airplane.

▶ The following is from *The Blinker*, published by the Chicago Y.C.: "The power boat boys have been most active in the Flotilla and quite a number of them (with a smaller number of sail boat men) have been acting as Temporary Reservists, often putting in plenty of night guard and patrol duty up and down the river, and along the waterfront, then getting home for a few hours' sleep, then down to the office for a full day's work. You know, we're irked at newspaper talk about the value of this or that sport for the war effort, but when it all boils down we submit that yachting stands at the head of the list: just look at the percentage of members in service, and most of them officers; consider the midshipmen training cruises; and particularly consider this Coast Guard work. We think it's time to stop apologizing for carrying on yachting, and it's time for some of our influential members to help make the public understand what we've done and are doing."

▶ Chicago Y.C. reports that "Bud" Snite sold *Copperhead* to P. K. Wrigley and then bought *Tahuna* from Joe Moeller. George Dalseg purchased *Taipan* from Harry McCluskey, who has sold his Tumlare *Friend-*



The attractive clubhouse of the Milwaukee Yacht Club

ship to Walter Devereaux. Laurie Hendrikson has commissioned *Bagheera*, which is owned by William Latimer. Dr. Hollis Potter has sold *Hornet* and George Hamilton has sold *Tarna*. Allen Wilson bought *Ariel*. This has brought the Chicago Y.C. R fleet to be raced this year to eleven. Mal Vail has chartered his R boat to Harry Nye.

▶ The Great Lakes Cruising Club's sixth School of Navigation starts June 8th. These courses require a tremendous amount of work in preparing home work and in the marking of papers. An enrollment of over 200 men for a 16-week course involves quantities of paper corrections. Gorden Brummel, dean, is now commissioned in the Navy, while William Phillips has been commissioned in the Army.

▶ Sheridan Shores Y.C., a leader in the Star and Arrow Classes, is prepared for an active season. The principal Star fleet series will be held on Sundays instead of Saturdays as in previous years. Sheridan Shore Race Week series is to be passed up this year. The Green Star series, The Great Lakes Championship Series, the International Elimination and the regular Club and Ladies' Series will be held. The Arrow fleet has scheduled 47 races. Al Brittain is commodore. Lt. Sam Clark, of this club, has been appointed Captain of the Port, Ludington, Michigan.

▶ M&M Y.C. and Oconto Y.C. Coast Guard Temporary Reserves are making a training cruise to the city of Green Bay on June 25th and Green Bay Y.C. Reservists are making a training cruise to Menominee on June 26th and 27th.

▶ The first big race of the season is sponsored by the Milwaukee Y.C. on May 28th, Chicago to Milwaukee. The Michigan City race, sponsored by the Columbia Y.C., is to be run on June 19th.

▶ Chicago Corinthian Y.C. has scheduled 13 Star races and 22 races for each of the following classes: Snipe, Lightning and Arrow.

▶ John McGinnis, of Jackson Park Y.C., has bought *Chinook*.

▶ This austere column feels that some comment should be made here of the great word battle raging between two Lake Michigan commodores. Commodore Bill Blackwood (alias Pill Backwood, etc.) fouled a mark in his club letter and brought upon himself the ire of one Guy, Gim or what have you, Hobelman of the Chicago Corinthian Y.C. Reading the news of the battle and realizing its cause, your correspondent fully appreciates his personal need for an armed bodyguard. Commodore Blackwood's slip seems minor (stated here without prejudice) in comparison with the slip made recently in this column in telling about the Milwaukee Y.C. Not only did we fail to run a picture of Milwaukee's clubhouse most graciously submitted, but we credited this club with certain honors in actual fact won by South Shore Y.C. of the same city. Past Commodore Ray Baty, of South Shore Junior Y.C., now in the Army Air Corps, writes to point out that the wonderful record made in the National One-Design Championship races last year was by South Shore members. Out of 18 trophies to be won in the Great Lakes and International competition in this class, they took 17. Your correspondent humbly apologizes for his mistake and hopes the armed bodyguard won't be necessary.

While on the subject of South Shore Junior Y.C., it should be said that out of about 70 members at least 30 are now in the armed services. The seniors at South Shore have made some great records, as, for example, taking first in the racing division of the Mackinac some five times these past seven years. The *Lively Lady*, a "Q", Otto Doeher, won the Lutz Trophy Races for five consecutive years; all of which means that South Shore is certainly on the map.

LIFE-SAVERS FOR THE ARMY

Many a flyer forced down at sea owes his life to the speed and efficiency of a 104′ aircraft rescue boat.

Today we are not only building these boats in record time for the Army, but also converting pleasure craft for use in the Coast Guard. Into all our boats goes the skilled workmanship that for years has enabled us to say of our auxiliaries:

"CASEY BOATS ARE RARELY OFFERED FOR SALE — THEY SELL THEMSELVES"

When Victory is won, we hope that one of the first new CASEY auxiliaries to have her keel laid may be yours. Meanwhile . . . buy U. S. War Bonds and Stamps.

CASEY BOAT BUILDING COMPANY, INC.
Fairhaven, Massachusetts

AIRPORTS
MECHANICAL TELEGRAPHS
NAVIGATION LIGHTS
DECK LIGHTS • PORTLIGHTS
SIGNAL LIGHTS • STEERERS
MARINE WINDOWS

. . . WE'RE ABOARD, TOO!

CARGO VESSELS & C. G. CUTTERS . . .
TANKERS AND TUGBOATS . . . P-T BOATS AND P-C BOATS

We're Aboard Them All!

★ DurkeeMarine Products are aboard cargo vessels building under the U.S. Maritime Commission program. In the small-craft field these high-quality, precision-built products are standard equipment for Navy, Army, Coast Guard and other smaller craft.

DURKEE★MARINE PRODUCTS CORP.
GRASMERE, STATEN ISLAND, N. Y.

ALL HONOR to the men of the Merchant Marine

Vigilance—nerve-wracking, relentless—in engine rooms, on bridges, at crew stations. This is the strain they are under. Night and day, they guide the merchant ships with their precious cargoes through icy spray or scorching heat. They are weaving a global web that shall stifle and destroy the Axis beasts.

Liquidometer's contribution to help lighten the task of these fearless men of the sea are gauges. One—the Levelometer, a dial type hydrostatic fuel level gauge that gives dependable, accurate, easily read indication of the liquid fuel level. Two—a Draft indicator that gives the pilot or engineer exact indication of the vessel's draft at all times. Three—the Rudder Angle indicator (hydraulic or electric) that responds to the slightest movement of the rudder and gives instant, accurate rudder indication on the bridge.

The results of years of experience in the designing and manufacturing of instruments for the Maritime Commission and the Navy are incorporated in all Liquidometer Gauges and Indicators.

Buy War Bonds—an investment in Victory

Liquidometer Corporation
MARINE DIVISION
41-19 37TH STREET, LONG ISLAND CITY, N. Y.

DETROIT JOTTINGS

By George E. Van

▶ This spring was strictly a red-flannel season here. There was a lot of bad weather, more than enough to go around, and most of us who were intrepid enough to try early varnishing and painting had to go back over many jobs.

Honors for opening the yachting year went to "Cap" R. H. Ross and his gang of cat boat skippers at the Edison B.C. They had a south wind, too, which immediately thereafter went into hiding for weeks and weeks. A brave little band turned out and three races were held. In other years, eight or nine were run off. Eighty of the club's 190 members are in service. Harold Kelley took the feature, a trick he has now done three years in a row. Frank Martin celebrated his outdoor debut as the club's commodore by taking the second and Heinie Schuck got the gun in the third race. Ross, dean of the club's skippers, was happy about taking second to Kelley.

▶ Considerable embarrassment was the lot of the race committee at the Detroit Y.C. when they attempted to get their cat boat season under way. It was to be a gala occasion; . . . Commodore Art Summerlee had his buttons specially polished and was to sail across the starting line off the main dock while colors were dipped and the gang cheered. Then a nasty black cloud scared the committee into calling off the opening ceremonies. The red faces came when the girls' committee, headed by Gen Winckler, Dot Trost, Doris Taylor, Helen Massey and Doris Nevins asked to take over. And down the river, at the Detroit B.C., they didn't notice the dark cloud and had some races. They were rather auspicious, too. They always are when Joseph Nelson Krolik wins at the Boat Club, something he has been doing since the Battle of Bloody Run or thereabouts. Another veteran handler of the single-stickers, Howard Jackson, got the other first.

Later on, the Detroit Y.C. opened its season, minus ceremonies, with seven races which went to Per Valboe, Art Gibson, Jr., Fred Meno III, Otis Taylor, John Trost III, Paul Williams and Ernie Grates. The latter were added starters from the K and Eight-Metre Classes. There was a whopping breeze of about seven knots.

▶ Yachting's Big Voice in this neck of the woods (and who can deny it?) is Commodore Harry C. Kendall who has himself in a permanent job, it seems, as the Detroit Y.C. Race chairman. He's been efficiently officiating in the post since 1928 and on and off for years before that. Not to leave out his regular splurges into the running of the Interlake and Detroit River Y.A. affairs, where he is "Mister Yachting." This month, he is going after his tenth triumph in the D.Y.C. Commodore's Race. He's lost only twice and he explains it all by saying it was done to keep up interest in the event.

▶ Whoever heard of seven boathooks on a 60′ cutter? . . . *White Cloud* had that many when those elderly gentlemen from the Chicago Y.C., Phil Hill and George Sollitt, her new owners, and Laurie Hendrickson and Vic Milliken sailed from Algonac early in May. The Fat Boy who is making with the typewriter with these words went along as did Malcolm Brand, another slightly boat-broke fellow. 'Way out in Lake Huron, Hill explained the seven boathooks were to be used to push off ice floes reported in the Straits of Mackinac. The combined years of yachting for those Chicago guys would cover about 150. So what? So they had to race all the way around to Chicago although no opposition except steamers was sighted. And no ice. Stops were made at Alpena, Cheboygan, Frankfort, Manistee and Milwaukee for fuel for man and fireplace.

At Alpena, Harry Fletcher greeted *White Cloud's* Frostbiters. Harry isn't fitting out his Twelve-Metre *Iris*. No crew. Brother Phil Fletcher is an officer in the Army Engineers and has sold his Voyager *Winyah* to Milwaukee interests.

MAINE COAST NOTES

By Lawrence B. Getchell

▶ A distinctly new and promising chapter in Maine's nautical annals was written at historic Castine when members of the first class to graduate from the new Maine Maritime Academy received their certificates on May 29th. The class, numbering 27, entered the Academy in October, 1941. It was graduated a year and a half sooner than originally planned because of the war.

The Academy's complement rose to 300 in May after the new entering class of 124 reported for duty during the first week of that month. Members of this new class represent eight States: Maine, Massachusetts, New Hampshire, Rhode Island, Connecticut, New York, Maryland and Michigan. On June 1st, these boys will start a three months' training cruise aboard a ship furnished by the federal government. On the same day, Rear Admiral Douglas E. Dismukes, U.S.N., Academy Superintendent, will begin to select members of the class to enter on December 1, 1943.

▶ The New England Shipbuilding Corp., the organization now operating the former South Portland Shipbuilding and Todd-Bath yards, announced on April 18th that it would build 37 more Liberty ships on a new contract. One of these 10,000-tonners recently launched there was named for the founder of the famous Bath Iron Works, Thomas W. Hyde.

▶ Don't let anyone tell you that the past winter along this coast hasn't been of the Grade A, old-fashioned variety. There's been enough wind to reach from here to LeMaire Straits and back, with sufficient frigidity to make a dozen ordinary winters. It is a toss up as to which have suffered the most throughout it all: the boys in blue, who've taken it on the chin offshore, or the shipbuilders who've labored in open air yards night and day with frosty tools that sting like red hot irons.

▶ Among the first yachts to be placed in commission at the Manset Boat Yard this season are George Nichols' yawl *Alewife* and E. S. Burke, Jr.'s, *International*. It is understood that the former craft will spend the summer cruising out of Southwest Harbor.

WEST COAST BUBBLES

By Kent Hitchcock

▶ Two sales head the news of transfers in ownership this month. The 106′ steel yawl *Contender*, familiar to all yachtsmen for her fine ocean racing performances, has been sold. Dick Loynes, of Long Beach, gave her up to Frank Kent, of Richmond. He sailed his 38′ ketch *Magic Carpet* against the *Contender* in the last Honolulu race. S. J. Dickey, of Balboa, has sold the Alden-designed 50′ ketch *Wayfarer* to George and Pete Lowe, of Balboa Island.

▶ Big Barney Lehman, veteran of the Star Class as both skipper and crew, has joined the Navy. Barney, an excellent boatbuilder and rigger, goes in as a petty officer of the carpenter's gang. . . . Chuck Ullman, skipper of the 45′ Bird Boat *Pipit*, is on active duty as Chief Bos'ns Mate on a training schooner. . . . Staff Commodore James Q. Woodworth, of the Coronado Y.C., is now in Florida, a lieutenant in the Coast Guard. . . . Thad Jones is a Chief Warrant Bos'n in the Coast Guard and is somewhere in the South Seas. . . . "Cap" Johanson is now Lt., j.g., Johanson of the Coast Guard and has an entire fleet of craft to look after. . . . Down from San Francisco way comes the news that those fine fellows from the California Speedboat Association have really joined the armed forces. John Sherwood is in the Photo Division of the Army. Bill Stabler is a flying photographer for the U. S. Navy, now based somewhere in the South Pacific. Paul "Tip" Anderson is a 2nd Lt. in the Transportation Division of the Army. Carl Dukey is with the U. S. Engineers in Panama, Canal Zone, as senior guard officer and Bob Kerr is Machinist's Mate with the Navy in the Flying Corp. Secretary Gordon Graham is with the Coast Guard Auxiliary and doing a big job with the OCD in Oakland. .

▶ Six months ago, it appeared that the yacht builders had expanded their facilities to the limit. Today, there isn't one that hasn't again doubled plant area and equipment. At first it was chiefly construction for the Navy. Today they are continuing the Navy construction program and are feverishly hammering out craft for the Army. At Newport Harbor, the Peyton Co., Victory Shipbuilding Corp. and Ackerman Boat Co. have doubled plant area to handle the construction of tugs and passenger-cargo vessels for the Army. Down at Los Angeles Harbor, the Wilmington Boat Works, with Hugh Angelman and Bob Carlson at the helm, are still turning out sub-chasers and are laying out some Army craft in the new addition to the yard. Hubbard's South Coast Co., Fellows and Stewart, and the Harbor Boat Co. are ahead of schedule on everything from picket boats to mine sweepers. South Coast has just completed construction on another new horizontal bed marine railway.

▶ The Balboa Power Squadron, with newly elected Commander Robert L. Boyd presiding, met recently at the Newport Harbor Y.C. to arrange new courses for the season. A course in advance piloting will be offered.

▶ The Annual Easter Invitational Regatta for small boats at the Balboa Y.C. on April 25th drew 21 boats in 4 classes. Entries, mostly in the junior divisions, represented Alamitos Bay Y.C., Newport Harbor Y.C. and Balboa Y.C. Using reverse scoring system, the results of the 5-race series were:

Falcon Class: 1st, *Bunny*, C. Wurdeman (11½); 2nd, *Aligero*, Frank Simpson (13¾); 3rd, *Chop Chop*, Don Thompson (13¾).

Snipe Class: 1st, *Dipper III*, Phil Greene, (6); 2nd, *Grey Goose*, Max King (15); 3rd, *Bobette II*, Bob White (16).

Balboa Dinghies: 1st, *Tardy*, Dwight Phillips (10¼); 2nd, *Bounding Bucket*, Morgan Cox (13¾); 3rd, *Red Hot*, Clark King (14).

Pacific 14′ Dinghy: 1st, *Janie*, Wendel Calkins (3½); 2nd, *Chaser*, Bob Henley (7¾); 3rd, *Buttercup*, Barbara Metcalf (9).

Crusaderware is a name synonymous with fine high-grade utensils.

Made of 18-8 stainless steel, Crusader utensils resist rust and corrosion, are easy to clean and retain their bright surface.

The Crusader pan shown below is only one of a wide assortment which will be available again when Victory comes.

LALANCE & GROSJEAN MFG. CO.
WOODHAVEN, NEW YORK

Nae mair need be said!

Three words tell the story of Teacher's popularity.
Connoisseurs of fine scotch know...

"It's the flavour"

Made since 1830 by Wm. Teacher & Sons, Ltd., Glasgow

TEACHER'S

Perfection of Blended Scotch Whisky

SOLE U. S. AGENTS: Schieffelin & Co., NEW YORK CITY • IMPORTERS SINCE 1794

We wish we could build 'em even faster

Today, we are turning out Minesweepers and Sub Chasers just as fast as our facilities will permit. Yes, we wish we could build 'em even faster in order to hasten that day of victory when we will again be building boats for private owners.

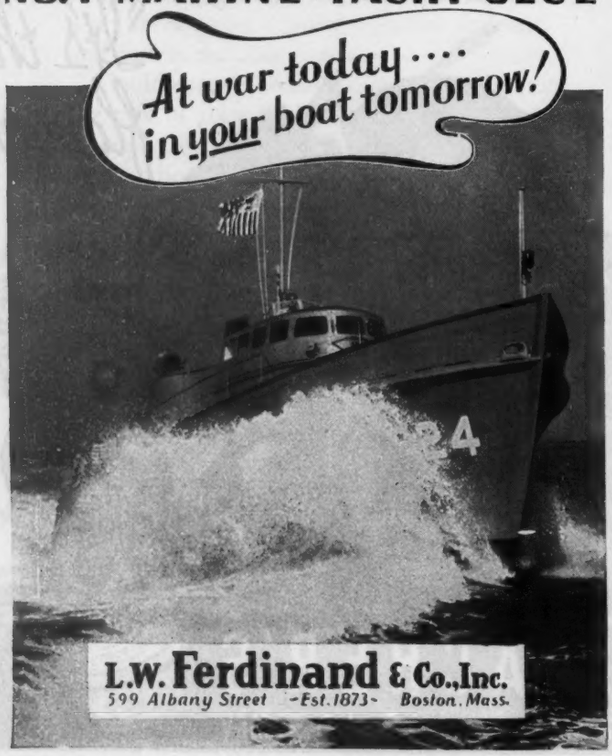
STADIUM

YACHT BASIN, INC.

FOOT OF WEST 3rd STREET · CLEVELAND, OHIO

Jeffery's

NO.1 MARINE YACHT GLUE



NAUTICAL BOOKS

We unhesitatingly recommend all of the books listed below.

NAVIGATION

Offshore Navigator, by Capt. Warwick M. Tompkins. Step-by-step through the process of finding latitude and longitude through the use of *H.O. 211*, one of the simplest methods of navigation. $2.00

Primer of Navigation, by George W. Mixter. A complete course in piloting is presented in the opening chapters. Celestial navigation has been simplified, only simple arithmetic is needed. Complete with tables, fully illustrated. $4.00

PILOTING AND SEAMANSHIP

Introduction to Seamanship, by Chas. H. Hall. A handbook of extraordinary completeness. $2.00

Coastwise Navigator, by Capt. Warwick M. Tompkins. Covers with utmost simplicity the many problems of the coastwise navigator, or pilot. $2.00

Piloting, Seamanship and Small Boat Handling, by Charles F. Chapman. New 1943 edition of this classic text for beginners. Used in the Power Squadron's elementary classes all over the country. 320 pages, amply illustrated. $2.50

Seamanship, by Charles F. Chapman. A fine new book by this well-known authority. Illus. $1.00

How to Abandon Ship, by Richards & Banigan. Illus. $1.00

Wire Splicing, by R. Scot Skirving. Clear text and good illustrations. $1.50

Encyclopedia of Knots and Fancy Rope Work, by Raoul Graumont and John Hensel. The same fascinating volume that sold for $10.00 when first published. Enlarged and revised. $5.00

Knots, Splices and Fancy Work, by Charles L. Spencer. Also contains information on wire splicing, tables of breaking strength. Illustrated. $3.50

DESIGNING AND BUILDING

Elements of Yacht Design, by Norman L. Skene. This book is a standard in its field, indispensable to naval architects, boat builders and yachtsmen. Revised to date. $3.50

Yacht Designing and Planning, by Howard I. Chapelle. A textbook on Naval Architecture for the amateur. Illustrated. $4.25

Boatbuilding, by Howard I. Chapelle. The complete handbook on wooden boat construction. Takes the amateur from choosing the right design to the final varnishing. Illustrated. $5.00

Laying Down and Taking Off, by Charles Desmond. A guide for mold loftsmen. $2.00

Wooden Shipbuilding, by Charles Desmond. A general work devoted to larger vessels. $10.00

Small Boat Building, by Edwin Monk. Plans and complete building instructions for a number of boats, power and sail, from an 8' pram to a 17' auxiliary. $3.00

Modern Boat Building, by Edwin Monk. A fine book containing much information on round bottom boats, beveling frames, laying down lines, spars, materials and costs. $3.00

BOAT RACING

Yacht Racing Rules & Tactics, by Gordon C. Aymar. Rules and maneuvers illustrated by sequence photos of Star boat models. $4.00

Men Against the Rule, by Charles Lane Poor. A century of progress in yacht design, this book discusses the history of the measurement rule and its effect on design and speed. A "must" book. Was $10.00. Now only $2.50

Learning to Race, by H. A. Calahan. The principles of yacht racing explained in a most lucid manner. Illustrated. $2.50

ATTENTION, BOAT AND SHIP YARDS

A number of yards have found it profitable to establish reference libraries of books on boat designing and building for their workers. While a few such books are listed above, there are a number of others for which there is not room on this page. We shall be glad to supply lists and prices on request.

BOAT SAILING

The A B C of Boat Sailing, by Herbert L. Stone, Editor of YACHTING. An excellent book for the beginner with many maneuvers illustrated with diagrams. $2.00

Sailing Made Easy — Told in Pictures, by Rufus G. Smith. A photo-and-caption book with remarkable, specially-taken, series pictures illustrating each step. The best way we know of to learn to sail without such an experienced skipper at your side. $3.50

Start 'Em Sailing, by Gordon C. Aymar. Designed to tell the beginner all he needs to know to handle a small sailboat. Illustrated. $2.00

Learning to Sail, by H. A. Calahan. Complete book on how to sail both small and moderately large boats. Illustrated. $2.50

SIGNALING

Learn the International Morse Code and International Code Flags the right way — quickly, easily — alone or in groups. Codes, word names of letters, procedure, instructions. Ideal for U.S.C.G.A. and U.S.P.S. classes.

Morse Code Memorizer. For sound, wig-wag or light. Price only 25 cents

Blinker Visualizer. Perfect light signals mechanically. The only way we know of for a beginner to learn blinker signaling alone and quickly. Price only 50 cents

International Code Flag Memorizer. Full set of flags in color. Price only 40 cents

We suggest that you order all together

MISCELLANEOUS

Fighting Fleets, by Critchell Rimington. A new, revised and enlarged edition of this well-known "Survey of the Navies of the World" this book is along the lines of the famous "Jane's." Best on the U. S. Navy. Includes naval aircraft. Copiously illustrated. $4.50

The Galley Guide, by Alex. W. Moffat. Recipes for shipboard from the simplest rough weather breakfast to course dinners, and drinks. No technical terms to confuse the amateur cook. $2.00

Glossary of Sea Terms, by Gershom Bradford. This book is regarded as an indispensable encyclopaedia of the sea. New enlarged edition. Illus. $3.50

Kenyon Weathercaster. Your eyes to observe wind direction and sky condition, a barometer, and one of these *Weathercasters* are all you need to forecast weather as much as 24 hours in advance. Prepared by expert meteorologists. Full instructions. $4.95

Meteorology for Ship and Aircraft Operation, by Peter Kraght, Senior Meteorologist, American Airlines, Inc. Convenient pocket size, but this fine book's nearly 400 pages cover all essential weather data in easily understood language. Indexed and illustrated. $3.00

UFFA FOX BOOKS

Sailing, Seamanship & Yacht Construction. Temporarily out of print.

Uffa Fox's Second Book. Just as good as the first — of highest value to designers, builders, yachtsmen. Illustrated. $10.00

Sail & Power. Like all Uffa Fox books it is of absorbing interest. $10.00

Racing, Cruising & Design. The fourth of this world famous series. $10.00

Thoughts on Yachts and Yachting. $10.00

BOOK DEPARTMENT

Your order will be filled promptly by mail

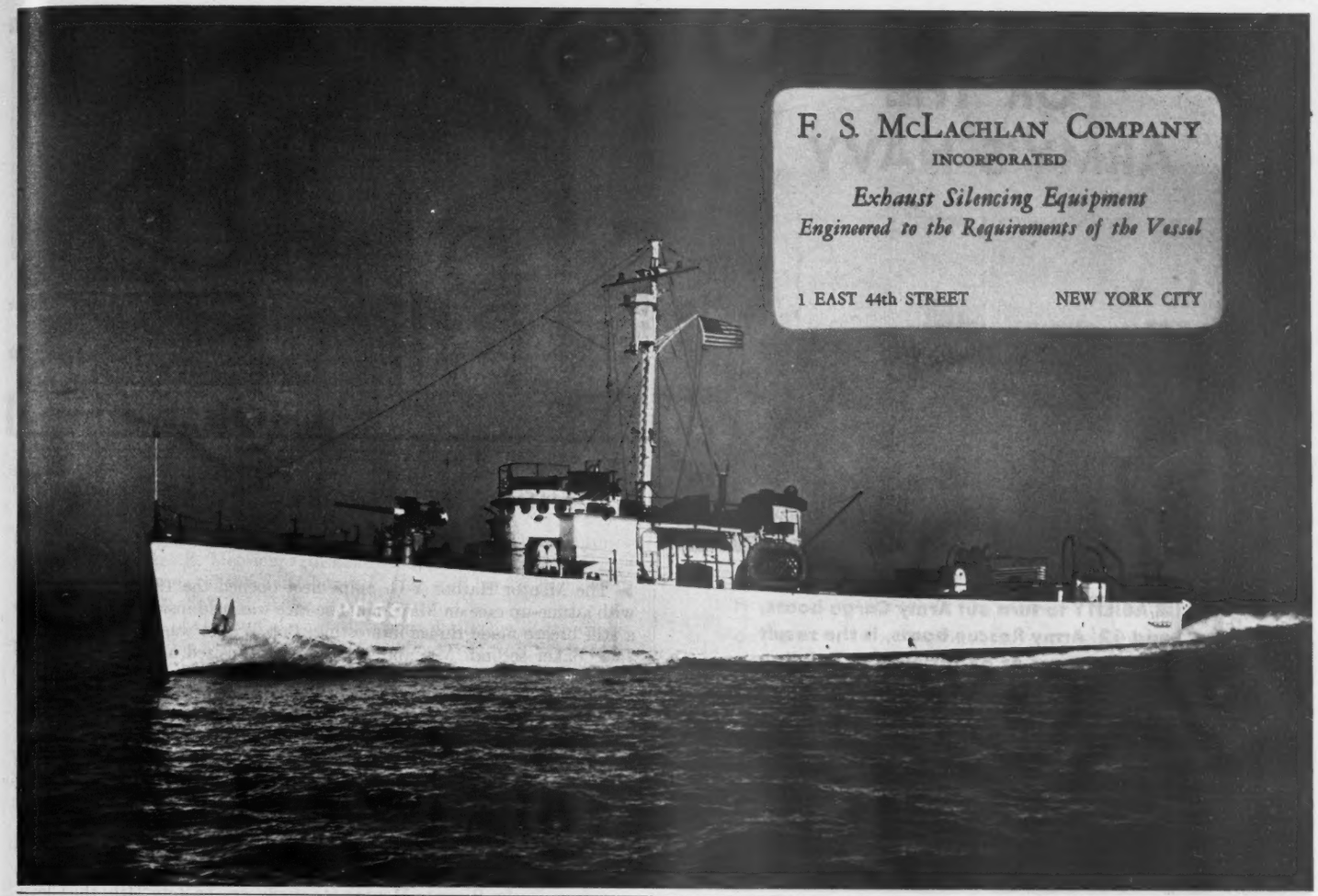
Yachting

Please send your remittance with your order

205 EAST 42ND STREET, NEW YORK CITY

NOTE: Books cannot be shipped to Army men overseas without written requests from the men and the written consent of their commanding officers.

Prices include delivery within the continental United States. Add 10% for delivery elsewhere. Prices subject to change without notice.



GUARDIANS OF THE WATERFRONT!

A DARKENED city sleeps. All is quiet. But on the waterfront the dull clank of winches — the low throb of great moving ships — the whispered orders . . . all say vital supplies are on the move.

Entrusted to help watch over the safety of harbor activity are the Coast Guard Temporary Reserves. These men, many of whom have worked hard and long today at their civilian duties won't sleep tonight — instead, they'll spend the night probing in and out of deep slips — along wharves, past shadowy warehouses — on the alert against sabotage.

Not qualified for active combat service on thundering PT boats, giant battleships, or deep diving submarines — these men contribute their services and boats. Their job is not glamourous, nor do they ask anything in return but the opportunity to serve their country as best they can.

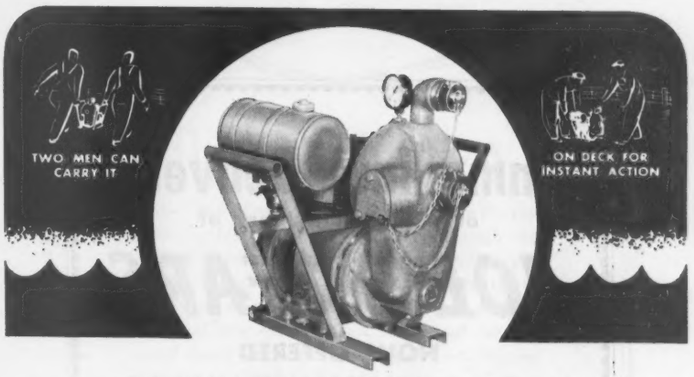
We are proud to have so many Universals in this service with such men.

Universal Motor Co.
312 Universal Drive, Oshkosh, Wisconsin
44 Warren Street, New York City, N. Y.

Universal 100% MARINE MOTORS

Keep Buying U. S. War Bonds

THE WORLD'S LARGEST BUILDERS OF 100% MARINE MOTORS



AN INDEPENDENT PUMP THAT WORKS ANYWHERE

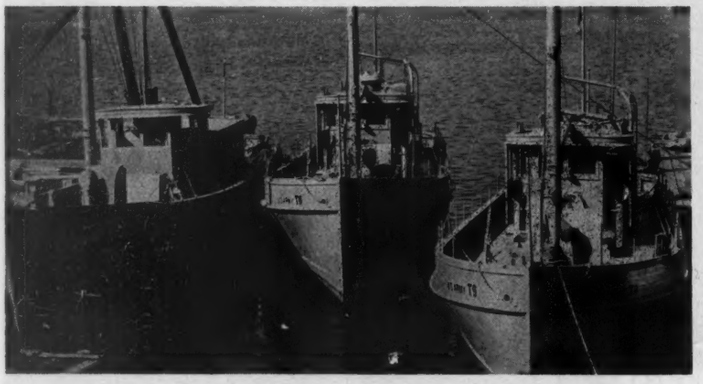
Fire below decks often puts regular and auxiliary power systems out of service, or makes it impossible to reach and operate regular fire pumps. But with a LaBour Type SFI available, you drop a suction hose over the side or through a porthole, crank the engine, and have a real fire-fighting stream in a matter of seconds. If the fire gets too close to your pump, two men pick it up and move it anywhere. It weighs 178 lbs.

Here is real protection for ships facing added hazards under war conditions. Only a direct hit can put a LaBour out of business, because it is completely independent of generators or cables, steam pipes or boiler pressure. Its single cylinder, air-cooled engine is ready for action every minute, and the pump delivers 50 gallons per minute against 65 lbs. pressure.

The pump is a self-priming centrifugal, of a type which has been Navy approved since 1930. Dirty water cannot clog or harm the pump—no relief valve is required. The pump and its operation are simplicity itself. Ask us to send full details about Type SFI—today.

THE LABOUR COMPANY, INC.
1609 Sterling Avenue Elkhart, Indiana, U.S.A.

FOR THE ARMY'S NAVY



OUR ABILITY to turn out Army Cargo boats, and 42′ Army Rescue boats, is the result of our many years of experience in building fine yachts to which we will return when Victory is won.

STURGEON BAY BOAT WORKS

Palmer Johnson, *Manager*

STURGEON BAY WISCONSIN

★ ★ ★

MARCH 1942

We receive first Navy "E" awarded to a shipyard on the Delaware.

NOVEMBER 1942

Army-Navy "E" flag with star indicating continued excellence of production, despite problem of equipping and moving into our new, larger plant.

★ ★ ★

New name—
New facilities
for better
production.

JOHN TRUMPY & SONS, INC.
formerly
MATHIS YACHT BUILDING CO
GLOUCESTER CITY, NEW JERSEY

Immediate Delivery

of a limited number of

JOES REVERSE GEARS

NOW OFFERED

NO PRIORITY NEEDED

We have a few new and used gears listed in our newly established Gear Exchange for resale. If you need a gear, write at once as size you require may be on hand.

ACT NOW! SUPPLY IS LIMITED!

State No. Cyl., Bore, Stroke, Speed, H.P., Type of Engine

OLD MAN JOE
is never too busy to think of you

SNOW-NABSTEDT GEAR CORP.
Hamden, Conn.

THE SOUTH SHORE OF LAKE ERIE

By John G. Robinson

▶ The Mentor Harbor Y.C. Snipe fleet opened the 1943 racing season with a tune-up race on May 2nd. The race was held inside the harbor and a stiff breeze made things interesting. Bob Wilson was the winner, with Jack Baker second. Mr. and Mrs. Harter capsized and the other four starters stopped to pick them up.

C. R. Newpher, chairman of the race committee, has announced the schedule of the racing season, May 23rd to October 3rd. Races are scheduled for Great Lakes 21's, Interlakes, Lightnings and auxiliaries each Sunday until July 25th, the date of the annual Mentor Harbor regatta, completing the summer championship series. The following Sunday, August 1st, marks the start of the fall championship series which runs until October 3rd.

Several special events are scheduled, such as team races between the Interlake and Lightning fleets on July 11th and 18th; the Falcon Cup race, from Rocky River to Mentor, for auxiliaries, on July 24th; the Cleveland Y.C. regatta on August 1st and the Inter-Lake regatta August 8th–12th.

▶ The Lakeside Y.C. launching day was May 1st and between one o'clock in the afternoon and seven in the evening some 84 boats were launched, which must be some sort of a record. Launching was done by the huge derrick scow of the Merrit, Chapman & Scott Corp. and an expert gang of riggers.

Dave Dailey has bought Bill Worell's fast Chris-Craft sedan runabout *Worella*.

▶ John Kraus, chairman of the sail race committee of the Edgewater Y.C., has announced the racing program for that club. There will be five series for Comets, Stars, Lightnings and Universals. The spring series, with Saturday and Sunday races May 29th and 30th; the club series, June 5th to 26th; midsummer, July 3rd to August 1st; elimination, August 7th to September 5th, and fall series, September 5th to 26th.

▶ The board of directors of the Cleveland Y.C. has elected Ernest Kindt, Sr., commodore and George E. Spencer vice commodore, leaving the position of rear commodore vacant for further consideration. Commodore Lee Wilson, now in the Navy, resigned for the duration.

D. F. Burrows, a new member, is an old-time yachtsman who was a member of the old club away back when the clubhouse was downtown. He has bought a 54′ auxiliary on Lake Michigan and will bring her to Rocky River.

Chester S. Hoag, now a lieutenant in the Coast Guard, has sold his 26′ Richardson cruiser *Our Sin* to J. F. and C. S. Wedler.

Harold Seltsam has sold his Mallard type auxiliary *Nautilus* to Benton Lefton, of Euclid, Ohio, and has bought a L.O. one-design class auxiliary sloop from Ed Flinterman, of Detroit. As Russ Jack is bringing his L.O. sloop *Fine Feather* to Rocky River this summer, two of this class will be in active competition.

▶ Because of difficulty in securing efficient help this spring, the members of the Westlake Y.C., of Rocky River, have bought the scow and pile driver formerly owned and operated by John Christofersen and will build their own docks at the property, on the west side of the river, as well as at the new site they have leased from the Metropolitan Park Commission on the east side. The club members are also building a new cabin scow which

U. S. NAVY PLANE REARMING BOAT

★ **VICTORY FIRST!** Our facilities are now devoted entirely to the building of boats for the Army and Navy. ★

★ When the war is won, we will again produce a fleet of fine pleasure boats even better than those which have been so outstanding in past years. ★

LYMAN BOAT WORKS 1550 FIRST STREET SANDUSKY, OHIO

will be moored at the east side docks as a general workshop for members. The club has doubled its membership since last season.

▶ R. D. Stone, of the Vermilion Y.C., has sold his 31′ Owens cruiser *Romary* to Clarence E. Meermans, of Lakewood, Ohio.

William G. Cooney, of the Vermilion Y.C., has sold his 32′ Richardson cruiser *Helen* to Dr. N. J. M. Klotz, of Wadsworth, Ohio.

Earl McKnight, of Grosse Pointe Park, Mich., a member of the Cleveland Y.C., has sold his 33′ Chris-Craft cruiser *Marilyn II* to R. D. Barden, of Columbus, Ohio.

Roy Conde, of the Lakeside Y.C., has bought Ralph E. Hyde's 26′ Wheeler cruiser *Hydeout*.

▶ George E. Johnson, Jr., of the Cleveland Speed Boat Club, owner of the 30′ runabout *Nor-Ru*, one of the fastest of Cleveland's speed boats, is now a lieutenant of paratroopers at Fort Benning, Ga.

R. C. Wainright, of Clifton Park Lagoon, is now a lieutenant in the Navy, stationed in Virginia.

Yachting on the Niagara Frontier

▶ The Buffalo C.C. outlook at Abino Bay, on Lake Erie, is bright despite the handicap of transportation due to gasoline rationing.

In a fleet of fourteen Lightnings, including the national champion of 1941 and the third place winner of 1942, there will be no less than ten active competitors.

In the cruising class, the club is sorry to see Bill Rogers' *Mora* sold to Cleveland where she will seek new laurels. During her three years, *Mora*, a Coastwise Cruiser, has won many firsts against worthy opponents.

"Shorty" Holzworth has at last found a yacht with adequate headroom for his six feet two inches and has bought the Ten-Metre *Sea Lark*.

News from the many members of the Canoe Club in the armed forces bring stories of a cruise along the Great Barrier Reef of Australia by Captain Ros Buck of the Army Amphibian Command. Bob Scheu, who joined the U. S. Coast Guard Reserve via the "temporary," is reported ready to graduate from the Coast Guard Academy.

▶ From the Buffalo Y.C. comes news of an active spring despite wartime restrictions. The opening stag on May 1st was well attended. The delivery of Jim Lenz' new Tumlare was announced. Skippers Nagle and Hanes expect delivery any day of a new mast for the yawl *Badger*.

It is expected that the Buffalo Y.C. basin will be filled and overflowing this season as many yachtsmen who formerly kept their boats at their summer homes up the lake will be obliged to seek berths nearer Buffalo due to gasoline rationing.

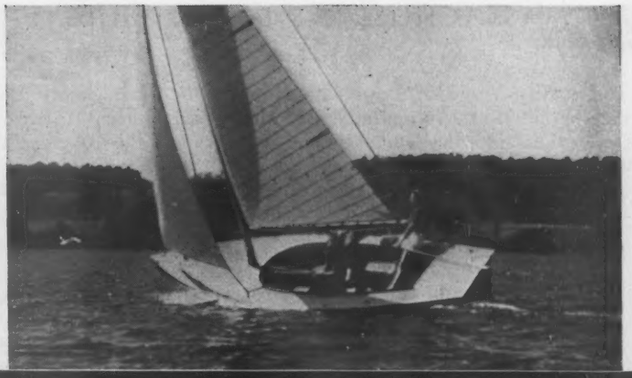
Past Commodore Charles Obersheimer, now a first lieutenant in the Army Air Corps, is reported on duty somewhere in Alaska. Harold Sanderson and Larry Bennett, formerly first lieutenants, have received their commissions as captains in the Army Amphibian Command.

▶ From Youngstown, N. Y., comes a report that current transportation problems will not prevent a successful season.

Thirty-three members of the Youngstown Y.C. are on active duty with the armed forces and the club has arranged to have available both sail and power boats for the use of any of these men who may be home on furlough during the open season.

Joe Parker's Six-Metre *Alarm* will be raced this year by Sherm Cannon; Joe will be away at school almost all summer. *Mist*, *Erne* and *Sprig* will fill out a good four-boat class of Six-Metres at Youngstown.

JAMES H. DANIELS



DID SOMEBODY ASK

WHAT ARE WE FIGHTING FOR?

Anyone who reads this magazine knows at least one thing we're fighting for: to go sailing when and where we please — to take the family for a spin around the lake or up the river whenever we get the urge — to enjoy the full luxury of God's wide open spaces — without having some goose-stepping so-and-so "plan" the whole program for us!

DUNPHY BOAT CORP. ▪ OSHKOSH, WISCONSIN

Dunphy BOATS

SHANGRI LA

In the "fog of war," *Shangri La* had the enemy guessing for one solid year. Even though the veil of mystery has now been lifted, the people of Tokyo and Berlin must still be guessing—for there are other *Shangri Las* about the world. These battle bases, afloat and ashore, stand ready to launch new attacks—to hit the enemy again and again and again.

Shoulder to shoulder with American industry, we of Wilcox-Crittenden are working day and night to see that supplies for America's fighting men go through *on time*. Wherever seacraft and aircraft support one another, there will be found the American equipment that *you* are helping to produce. So, keep 'em rolling—keep every *Shangri La* well supplied—

KEEP ON BUYING U. S. WAR BONDS!

Wilcox, Crittenden & Co., Inc.

"Dependable" Marine Hardware Since 1847

10 South Main Street

MIDDLETOWN, CONNECTICUT

SANDS

MASSACHUSETTS BAY FLASHES

By Ed Earle

▶ The South Boston Y.C. was slated to open the Massachusetts Bay racing season with its 75th anniversary Memorial Day regatta. Because of the legal holiday, the committee planned to run all the events on the program on Monday, May 31st, instead of splitting the affair over two days. The Memorial Day exercises, opening regatta and Diamond Jubilee dinner-dance, will thus be a one-day celebration.

▶ The 1943-44 officers of the Boston Power Squadron include Commander Dr. Lyle E. Reid, Lieut. Commander Charles S. Young, 1st Lieut. R. Perry Collins, 2nd Lieut. John S. Graham, 2nd Lieut. Howard W. Lewis, 2nd Lieut. Robert F. Shaw, Treasurer Malcolm Russell and Secretary Oscar G. Wheeler. The annual dinner brought out an enthusiastic gathering. Past Chief Commander Wesley Morse presented certificates to new members while the Advanced Pilots and Junior Navigators were on deck to receive the cheers of the Squadron.

▶ This month will see racing get under way again at Marblehead with practically the same set-up as last season. The 30 Square-Metres, International One Designs, M-B Class and National 110 Class will have active fleets this summer. Frank Scully, the National 110 Class titlist, and his brother Bob have acquired a new boat.

▶ The gasoline problem is in the process of clearing. Some cheer was afforded by the recent word from the O.P.A. in Washington that yachtsmen holding gasoline ration coupons issued prior to the ruling, rescinding the O.P.A.'s previous directive allotting gasoline to inboard and outboard boats, will be able to procure fuel, and boats with gasoline already aboard will not be prevented from operating.

The first relaxation of the O.P.A. ruling denying gasoline to all non-occupational boats, save those in the Coast Guard Auxiliary, has been obtained in area within the jurisdiction of the New Bedford Custom House, where William J. Fitzgerald, deputy collector of customs, has been granted authority by the State O.P.A. and Boston Coast Guard headquarters to issue gasoline rations to all registered boats, even pleasure craft, provided the owner supplies sworn affidavits that the fuel is to be used for fishing. Owners who can prove intended use of their craft for fishing will be given two affidavits, one going to the Coast Guard to establish the boat as a fishing craft, and the other to the rationing board for gasoline.

▶ While the gasoline situation is undergoing clarification in this section, there is an unusual demand for sail boats and auxiliaries according to the yacht brokerage offices like John G. Alden and Eldredge-McInnis. Many yachtsmen in the armed services have bought boats, which will remain in storage for the duration, with a weather eye on the shortage of good boats after the war.

▶ A. S. Pinkham has joined the office of John G. Alden in the expediting department.

▶ The office of Eldredge-McInnis reports the sale of the Casey auxiliary cruiser *Cherub* from Lt. William A. Heywood, U.S.N., to Fulton Eldridge, Whitman; the 30′ Richardson cruiser *Bejo* from Howard W. Lewis, Newton, to Matthew A. Petrowski, Salem; the Richardson cruiser *Argosy III* from H. C. Priest, Boston, to T. M. Petersen, Boston and Springfield; the 21′ Dodge utility *Mildor* from Dr. R. M. Shalit, Boston, to Albert A. Drummond, Boston; the 40′ auxiliary sloop *Wenega* from B. S. Westlake, Belmont, to Richard Tramontano, Boston; the Matthews cruiser *Sara Marie* from Justin W. Hicks, Boston, to Lt. G. F. Frazier, Cambridge.

▶ The 28′ 6″ auxiliary sloop *Radiant*, designed by MacGregor in 1938, has been sold, through the office of Eldredge-McInnis, from Thorsten Nelson, Newport, R. I., to Arthur C. Sturgis, Boston. She will be used in Dorchester Bay.

LAKE ONTARIO NEWS

By W. Peck Farley

▶ To those of us who have been declared members of the Rocking Chair Fleet for this Race against Hitler and the other challengers, it is interesting to note how many of the group brought up in and around the Crescent Y.C. have found their way into the service of the naval units of our country. All are doing their jobs competently and we at home feel keenly the honor which they reflect upon our club, now so drastically limited in its operation.

Two of the boys, Lt. Comm. Robert McCormick and Ensign Horace Montgomery, are assigned to tasks unknown to us. The exploits of Lt. George Cox have been already publicized through the book *They Were Ex-*

GREAT OPPORTUNITIES for NAVIGATORS

Weems Texts and Instruments

Those who wish to further their present knowledge of navigation will find many of the texts and instruments used in the Weems System invaluable and are invited to purchase these separately without necessarily taking either the full marine or air navigation courses.

Marine Navigation. Latest methods	$5.00
Air Navigation. Famous Weems Gold Medal Text Book	3.50
Learning to Navigate	2.00
Simplified Celestial Navigation	3.00
Radius of Action of Aircraft	3.00
Instrument Flying	4.00
Navigation Charts. Five new skeleton navigation charts for dead reckoning and radio navigation. Price per chart	1.00
DEAD RECKONING EQUIPMENT	
Aircraft Plotter Mark II (Department of Commerce Type) Scales 1:1,000,000 and 1:500,000	$2.00
Navigation Note Book	2.00
Combination: Navigation Note Book and Plotter	3.60
Universal Plotting Sheets per dozen or in pads	.50
Speed-Time Distance Calculator	$1.00
Dalton Mark VII Computer	7.50
Dalton Type EI-B Computer	10.00
Dalton Model "J" Computer	40.00
Dalton MK. II, III and IV Plotting Boards, Respectively	$8, $18, $12
CELESTIAL NAVIGATION EQUIPMENT	
Line of Position Book	$1.50
Illyne Star Chart 31″ by 21″ with instruction booklet	1.00
Star Altitude Curves	5.00
Standard Second-Setting Navigation Watch (18 Ligne)	80.00
Marine and Aircraft Sextants — on Application	
American Air Almanac	1.00
NEW BOOKS	
Student Pilots Training Primer	$2.00
Simplified Theory of Flight	2.00
A Pilot's Meteorology	2.50

Schools in Twelve Cities
also Correspondence Courses

You may study the Weems System through carefully conducted correspondence courses, or through individual or classroom instruction at schools in the following cities: Annapolis, Baltimore, Boston, Denver, Los Angeles, Miami, New Orleans, New York, Philadelphia, San Diego, Seattle, and Washington, D. C.

WEEMS
Will Teach You
Modern
NAVIGATION

Great opportunities await those who prepare themselves now for service as navigation officers. You can master this subject in a surprisingly short time by studying the Weems System of Navigation. The completeness and efficiency of the Weems System are attested to by many world-famous navigators. Because its simplicity and accuracy save time and costly errors, Weems is fast surpassing other navigation methods. The United States, foreign governments, and many commercial air lines have adopted portions of the Weems System. Prepare now to do your bit as a navigator.

WEEMS SYSTEM OF NAVIGATION, ANNAPOLIS, MARYLAND

New York: Gabriella Placht, 46 East 46th Street, *MU 9-7277*
Chicago: A. P. HEFLIN, 1443 Hudson Ave., *Michigan 9290*

Please send me descriptive literature on navigation course. I am interested in Marine Navigation ☐; in Air Navigation ☐.

Name.....

Address.....

City..... *State*.....

Your Chronometer

CAN HELP WIN THE WAR

Supply is a matter of SHIPS, and ships must have CHRONOMETERS . . . to fix the ship's position, time the ship's speed, fire the big guns in battle.

We are humbly proud that the Government has found ROTH BROTHERS capable of rebuilding chronometers, mounted chronometer watches and torpedo boat watches . . . able to supply by the thousands and make parts for these intricate vital instruments.

We are proud that America's largest and most important War Plants turn to us for their needs in industrial stop watches. ROTH BROTHERS' forty (40) experts are on the job every minute, specialists in complicated time-keeping mechanisms.

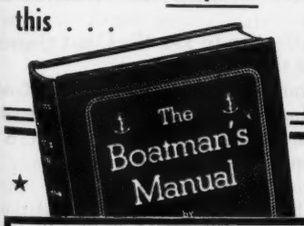
And, when the war is won, we will once again supply you with the finest instruments the market affords.

YOU CAN HELP—Help the men at sea and on the firing lines. Help the engineers in war plants. If you have any of these instruments that are idle or being used for a less important purpose, SEND THEM TO US. We pay liberally for chronometers and stop watches. No matter what their condition, we put them in perfect shape and speed them to do their part in WINNING THE WAR.

It is understood that if, in our opinion, the instruments you send are worth more than you estimate, you will be paid accordingly. If your estimate seems high, you will be informed and, if we do not agree on a price, chronometer or other instrument will be returned at our expense.

ROTH BROTHERS CHRONOMETER CO. • 104 East 23rd St., New York, N.Y. LARGEST CHRONOMETER SHOP IN AMERICA

There has never been a handbook as complete as this . . .



THE BOATMAN'S MANUAL

By CARL D. LANE

IN concise, direct language and with hundreds of helpful drawings this volume presents a full course in coastwise navigation, detailed advice on the handling of *all* types of boats, a complete course in sailing, new and simplified signaling charts, tune-up and trouble-shooting advice for all types of marine engines, etc. THE BOATMAN'S MANUAL is the first volume of such scope, clarity or comprehension available to the coastal or inland boatman. The ideal guide for yachtsmen, it is equally valuable to Coast Guardsmen and merchant and naval sailors. Covers and binding waterproof, pocket size to fit sea bag, reefer pocket or small boat book rack. 596 pages. Profusely illustrated.

$3.50

W.W. NORTON & CO., 70 Fifth Ave., N.Y.

"BOOKS THAT LIVE"

DEFENSE COMES FIRST

A-E-CO

supports this demand with all its facilities to supply

A-E-CO

Marine Deck Auxiliaries for our Navy and Merchant Marine

AMERICAN ENGINEERING COMPANY

Philadelphia, Pa.

DE GRAUW, AYMAR & CO.

ESTABLISHED 1827

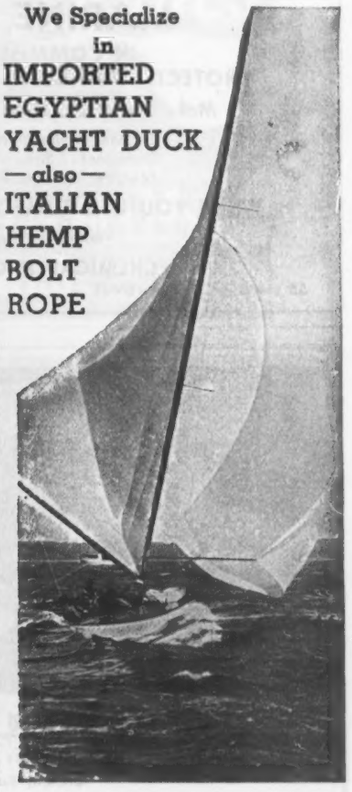
35-36 South St., New York, N. Y.

We Specialize in

IMPORTED EGYPTIAN YACHT DUCK

— also —

ITALIAN HEMP BOLT ROPE



Simplex
BLUDWORTH
DIRECTION FINDERS
DEPTH SOUNDERS
WE GIVE 'EM THE EARS AND THE EYES TO KNOW THE DEPTH OF THE SEA...
Simplex
BLUDWORTH
MARINE INSTRUMENTS

RUMFORD
MARINE FINISHES
IN COMMISSION OR NOT
PROTECT YOUR BOAT WITH RUMFORD PAINT
Make Your Plans Now for an All Rumford Job
Topsides Whites, Black, and Colors — White Undercoat — Spar Varnish — Green Anti-fouling Bottom Paint — Deck Paint
WHEN YOU USE RUMFORD WE GAIN A FRIEND
Write for Free color book to
CHEMICAL PRODUCTS CORP.
55 PAWTUCKET AVENUE RUMFORD, RHODE ISLAND

War Work at the Birthplace of Many Winning Yacht Sails
Ratsey & Lapthorn, Inc.
Sailmakers Since 1790
City Island Tel. City Island 8-1012 New York

PETERSON BOAT WORKS
STURGEON BAY, WISCONSIN
WE ARE BUILDING 100 PER CENT FOR VICTORY

pendable. The present whereabouts of George is not known but we are proud of the fact that the tradition of the striking power of small boats in the Southwest Pacific is being carried on by Lt. Com. Allan Harris. Lt. Daniel Huntington is attached to a destroyer in the same area. Lt. Robert Farrington has been twice decorated for heroism under fire and in connection with the sinking of the *Lexington*. Francis Purcell, of the old *Ripple* crew, has had some tough experiences with the Merchant Marine, being under almost constant bombardment on one trip.

▶ One of the best stories of the war to Crescent is that of Richard Hart, formerly of the Crescent Y.C. and currently in the Royal Canadian Navy. Somewhere in the Atlantic, Dick's ship was torpedoed and he and the rest of the crew had to take to rafts. Some time later, a U. S. ship plowed up to them through the night. Her searchlight pushed aside the darkness around Dick's raft. As the boat approached for the pick-up, a voice from above yelled down: "Dick Hart, what are you doing here?" It was Win Delong, now Lt. Winfield Delong, who had grown up next to Dick in Watertown. It's a small world! All the reports are not as welcome. It was with great regret that we heard of the death of Lt. Com. Lance Massey.

▶ Donald Welch, energetic commander of the Sodus Bay Y.C. Flotilla 32, has conducted a weekly class of approximately 20 students in Wolcott, N. Y., in the Elementary Power Squadron Course, and has been successful in maintaining interest.

Eighteen club members have filed application to join the Coast Guard for part time duty on patrol assignments this summer.

The following have been appointed committee chairmen at Sodus: Racing, W. G. Croucher; Protest, B. A. Harness; House and Dock, Floyd Winegard; Robin Restrictions, Lawrence Morley; Social, Robert S. Bloomer and Roy Robinson (co-chairmen).

▶ The Youngstown Y.C. opened the 1943 season with a dinner at the clubhouse late in April.

Jim Coe has sold his Ten-Metre *Skylark* out of the club.

There are at present 35 members in the armed forces.

Although the racing schedule for 1943 is not complete, George White, Sailing Secretary, will again be on hand to run the races. At least two major events have been planned. One is the annual race to Port Dalhousie and return for the Tycoona Trophy; the other is a club cruise to the Bay of Quinte the week of July 9th. Since there will be no L.Y.R.A. regatta this year, this cruise takes its place. Boats from any other clubs on the lake are urged to participate. One old-timer at this event, who will be missed this year, will be Bill Grant of the Royal Canadian Y.C.

All four "Sixes" at Youngstown will be in commission this summer. The Parkers have chartered *Alarm* to Sherm Cannon, who is expected to "go places" with her.

Chuck Spaulding is planning to take his Eight-Metre *Cayuga* to the Put-in-Bay regatta this summer. Four other 8's are scheduled to enter.

▶ Unusually bad, wet, cold weather has held up work on boats at the Rochester Y.C. so that it is doubtful if racing will really get under way until about the middle of June.

Bill Harris, steward for over twenty years, who was absent last year due to ill health, will be back at his helm this summer.

Blue Goddess, Ten-Metre formerly owned by T. A. Sharp, has been sold and will go to Chicago.

William Lourette has been an honor man twice in training classes since entering the Army Air Forces.

Dependable Yacht Insurance
MARINE OFFICE OF AMERICA UNDERWRITERS
MARINE OFFICE OF AMERICA
HEAD OFFICE
116 JOHN STREET • NEW YORK
Offices in Principal Cities

LONG ISLAND SOUNDINGS

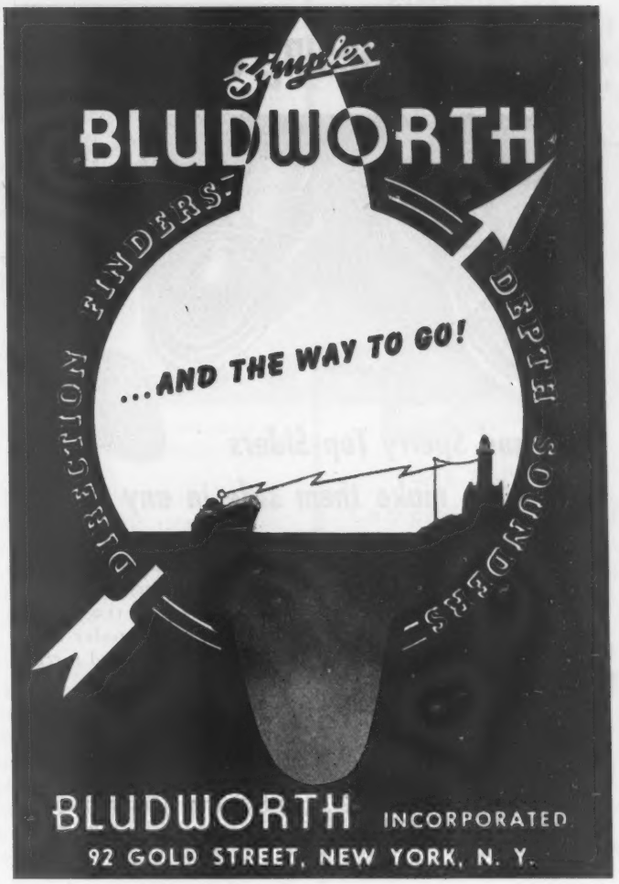
By Starboard Tack

▶ To the joy of all hands, the Larchmont Y.C. again beat the gun on the new season by running off its annual "eye-opener" regatta on May 8th. Five Internationals made up the fleet that raced under nearly ideal weather conditions — but without wind. *Patricia* (A. P. Davis) led the fleet, with *Aileen* (Cornelius Shields) and *Feather* (J. L. Merrill) finishing in that order. Albert Marx's *Alberta* and J. R. Sheldon's *Sheldrake* made up the flotilla. Larchmont went into commission on Saturday, May 5th, and a special Y.R.A. race was scheduled for the day following.

▶ The International Class held its annual spring meeting at the New York Y.C. on April 27th, at which time the following officers were elected for the coming year: Cornelius Shields (Chairman), Robert W. Perkins and John K. Starkweather. Anticipating that there will be no less than 20 boats actively racing, a full calendar has been set up. The Y.R.A. Championship races will be divided into three series as follows: 1st, May 30th to July 5th; 2nd, July 11th to August 22nd; 3rd, August 29th to September 26th. The Sunday races will be for the Y.R.A. Championship, and the Saturday races for the Royal Bermuda Series. Both series will be conducted under the Y.R.A. rules and it will be necessary to sail in 50 per cent of the races to qualify. Frank E. Campbell has again put up a prize for the combined Saturday and Sunday Series, to be known as the Season Trophy.

▶ *News from the Clubs:* The Halloween Y.C. went into commission on May 15th, Harlem and Bayside on the 15th and City Island on the 22nd. . . . The Rocking Chair Fleet of America, Harlem Porch I, held its annual dinner at the Harlem Y.C. on April 17th. Joseph DeCastro was duly retired as Chief Rocker by the election of Jay Heynen to that exalted position, and William Hagerdorn was elected First Rung. . . . Bayside is to be commended on its novel plan of enlisting the interest of young members in a newly devised group to be known as the Bayside Y.C. Cadets. It sounds like the best kind of way for boys and girls between the ages of nine and thirteen to spend a pleasant and nautical summer. . . . Under the leadership of Commodore Walter S. Finlay, Jr., Vice Commodore George W. Sheppard and Rear Commodore Harlow W. Young, the Huguenot Y.C. is anticipating a particularly active season. The entire fleet expects to be in commission. . . . The New Haven Y.C. will be missing, having decided not to open because of the gas situation.

▶ *Local Intelligence:* Everett B. Morris, ace nautical commentator of the *Herald-Tribune*, now on active service with the Navy, has been promoted from lieutenant to lieutenant commander. . . . After missing it by inches in years past, Corny Shields, sailing *Sissy*, captured the national Class B dinghy championship held at Larchmont in mid-April. Jack Sutphen, in *Rum Dum*, and Arthur Knapp, in *Pop Corn*, were second and third with 181 and 164 points against the champ's 188. . . . Winsette Marine, well-known nautical outfitters, have moved to a new location at 358 City Island Ave., City Island, N.Y. . . . What with new restricted areas, testing ranges and other nautical detours being created almost daily, Long Island skippers are advised to keep a weather eye on chart changes which occur with ever increasing frequency. Among the most recent are: a new restricted area in Fort Pond Bay, the relighting of the gong buoy on Stratford Shoal Middle Ground, relighting of the gong buoy off the Norwalk Islands, the change to white of the lighted gong off Big Tom Rock (Eastchester Bay), and the moving of lighted gong buoy 44A off Execution Rocks.



CUMMINS
Dependable
DIESEL
It's one day nearer Victory
. . . and one day nearer the time when you can power your boat with a Cummins Dependable Diesel. Marine models, 33 to 250 hp.
CUMMINS ENGINE COMPANY, Columbus, Indiana

These Feet Belong to the C.G.A.

Thousands of free-flexing rubber tentacles combine to produce a positive squeegee-suction action.

—and Sperry Top-Siders make them safe in any sea!

In all weather and under all conditions the Coast Guard Auxiliary performs an important "watch dog" service. Like their brothers in the Air Corps, the Navy and the Army, scores of C. G. A. men depend upon the patented Sperry Top-Sider sole for complete safety on wet or dry heeling decks. Before the war Sperry Top-Siders were famous in the finest yachting circles—today they are serving the armed forces with greater foot safety. Your dealer may have Top-Siders in stock. If not, write directly to us.

SPERRY TOP-SIDER "STICKS LIKE A BARNACLE"

Sperry Top-Sider Footwear
15 Main Street, Beacon Falls, Conn.

A PREDICTION...

While we are now engaged in "all out" war production . . . we can predict one thing about the post-war Mack Mariner Marine Diesel. It will be an even better diesel than our present one . . . more rugged, more dependable, more economical.

Mack

Mack Manufacturing Corp.
Marine Engine Division
Long Island City, N. Y.
Pacific Coast Distributors . . .
Atlas Imperial Diesel Engine Co.

BUY U. S. WAR BONDS

MAINTAINING IN WAR
THE *Leadership* WON IN PEACE

E

ROBINSON
BOATS AND CRUISERS

Our NAVY "E" award was not a goal but a milestone—we're doing even better work today. And when Peace comes again we'll be building better boats than ever—for you.

ROBINSON MARINE CONSTRUCTION CO.
BENTON HARBOR, MICH.

COMET COMMENTS

By Malcolm D. Lamborne, Jr.

▶ An appeal to all Comet fleets to conduct their usual fleet eliminations exactly as if a National Regatta would be held this year is contained in the 1943 supplement to the handbook, being issued to members this year in lieu of a new yearbook.

The national officers have agreed that, after the war, proper honors will be given to those who qualify in their fleets and who would otherwise have been entitled to participate in a national championship. The exact form of this competition has not been determined but it will be based on National Regatta rules as far as qualification is concerned.

Comet owners are being asked to maintain their membership in the C.C.Y.R.A. so that there may be no question about qualification in fleet eliminations. Fleet secretaries also are being asked to keep careful records. And don't forget you must be a member in good standing to qualify for the High Point Trophy competition.

▶ The final report of the High Point Trophy Committee discloses a new second place skipper. He is Paul R. Roster, of the Willow Bank Comet Fleet on Lake Owahgena, in New York. His *Care Free* scored 1714 points. Winner was Harold T. Martin, of the Green Pond (N. J.) S.C., with 1718 points. Richard Claver, with 1695 points, was third place winner. He is from the Algonquin Y.C. fleet, at Point Pleasant, N. Y.

▶ Newest class measurers to be added to a long list in the handbook are Ed Scheick, of Bronx, N. Y.; Warren Perkins, of Skaneateles, N. Y.; R. Clyde Cruit, of Washington, D. C., and J. A. E. McDonald of Quebec, Canada.

▶ Here are some of the new fleet officers for the year: Barnegat Bay Y.R.A.: John P. Benedict, captain; James M. Earle, secretary. Red Bank Y.R.A.: Roger Ryan, captain; Gloria Moore, secretary. Huntington Y.C.: Thomas Buermann, captain; Florence Buermann, secretary. Severn River: James A. Campbell, captain; W. Edgar Combs, secretary. San Juan Blue (Puerto Rico): Vicente Balbas Pena, captain; Francisco Bueso, secretary. Red Dragon Canoe Club: E. B. Marter, captain; I. L. Stephan, secretary. Willow Bank: Paul R. Forster, captain; George Green, secretary.

Officers of the newest fleets to be chartered are: Sandy Bay, Buffalo, captain, Edward J. Hawkes and secretary, Robert T. Brunton; Echo Bay, New Rochelle, captain, Charles E. Rogers, and secretary, Arthur Miller.

▶ Spring racing began last month in Washington for Potomac River Fleet No. 2 and by this month Fleet Captain Ed Braddock was expecting a turnout rivaling the lush days of 1935–37, when as many as 20 Comets came out for the Sunday races under auspices of Potomac River S.A.

110 TIDINGS

By J. Don Peterson

▶ It is with much regret that we have received a letter of resignation from National Secretary Martin L. Cassell, Jr. He has done a splendid job and has set a goal for his successor. Secretary Cassell makes the excellent suggestion that all owners of 110's who are unable to sail this summer do their utmost to have their boats in commission, even though raced by others. This will keep the class active for the duration and encourage growth after the peace. The fellows home on furlough will surely enjoy the opportunity to race, so let's "Keep 'Em Floating!"

▶ Secretary J. W. Horner, Jr., sends word that the Wianno Y.C. fleet at Osterville, Cape Cod, has been just about decommissioned for the duration. All of its members, including Secretary Horner (Pvt. Horner), are now either in the armed forces or busily engaged on the home front.

▶ Harry Herbert's *Hobby* and Don Peterson's *Quitz* (formerly *Pat II*, Lieut. Gordon Atwater, U.S.N., owner) have been engaged in some preseason tune-up racing. Other Long Island Sound 110's will be in commission soon.

John Meade, of the Long Island Sound fleet, has forsaken his *Release* for a torpedo boat for the duration.

Corp. Heinz Koehler and his familiar *Seadown* will not be on the starting line this season. He has a more important mission with the Air Force.

▶ A resolution has been passed allowing rigging wire over the 1/8" minimum dimension to be used. This will enable owners to use larger wire for replacement when 1/8" is not obtainable. It is felt that this new ruling will not alter the one design characteristic of the class.

CHELSEA
A STANDARD OF ACCURACY
SINCE 1886

In peacetime, as in war, men's lives can depend on accuracy.

Chelsea timepieces have provided that accuracy to four generations of mariners—for whatever adventure lay ahead.

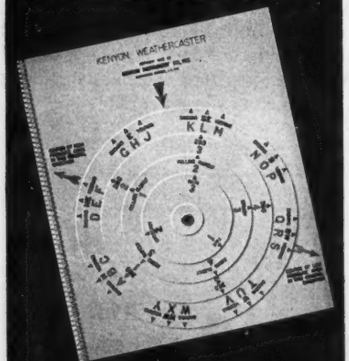
So, too, have four generations of Chelsea craftsmen increased their skill in the art of fine clock-making.

No Chelsea Clock has ever worn out

CHELSEA CLOCK COMPANY
320 Everett Avenue, Chelsea, Mass.

KENYON

THE KENYON
WEATHERCASTER



In war as in peace, an invaluable aid to the man at sea in predicting the weather. $4.95 post paid.

KENYON
INSTRUMENT CO., INC.
Huntington Station, L. I., N.Y.

FROM SAN FRANCISCO BAY

By Jesse L. Carr, M.D.

▶ Close astern of the excellent new bulletin featured by the Aeolian Y.C., comes the introduction of the monthly journal sponsored by the yacht clubs of the Lower San Francisco Bay. Enlisting in this joint undertaking are the Coyote Point, Palo Alto, Sequoia and South Bay Yacht Clubs. These four organizations have already announced an active season for 1943, beginning with the opening day of the Northern California season on May 2nd. Officers of these clubs for 1943 are Coyote Point Y.C. Commodore, Oscar R. Thayer; vice commodore, H. Lee Engel; secretary, Jack Edwards; treasurer, Dr. A. J. Corbett; port captain, Don Larke.

Palo Alto Y.C. Commodore, Carl W. Johnson; vice commodore, Harry M. Barnes; secretary-treasurer, Mark C. Nesbit; port captain, Foree Chittenden.

Sequoia Y.C. Commodore, Ed. M. Brickey; vice commodore, Francis B. Tinney; secretary-treasurer, Horace M. Scales; port captain, George Guntli, Jr.

South Bay Y.C. Commodore, Arthur G. Moore; vice commodore, Frank Filben; secretary-treasurer, Charlie Osborne; port captain, Walter B. Jones.

In keeping with the times, each club is listing a ladies' race some time during the season and both South Bay and Palo Alto will sponsor ladies' races for the Stephens Trophy. Especially interesting is inclusion in the bulletin of a composite tide table for the current month, including only the week-end dates but tabulating the changes in tides all the way from the south of San Francisco Bay to the Golden Gate.

▶ Novel, yet practical, was the departure this year from the traditional routine of opening day on San Francisco Bay. Instead of the usual mass assembly and yacht parade at the Marina and along the waterfront to the Bay bridge, the opening of the season was celebrated by a practice mass evacuation by yachtsmen of simulated casualties from the San Francisco waterfront. While the original plan called for power boats only to take part in the evacuation, with sail boats keeping in the background as a drop for publicity and motion pictures, the sail boat men joined a large power cruiser squadron to take aboard and evacuate to stipulated designations over 2000 "refugees." This was done with speed and success and with no accidents reported, either to boats, personnel or passengers.

▶ At the spring meeting of the Small Boat Racing Association, the following officers were elected: Chairman, R. L. Clazie, Vallejo; vice chairman, Dick Hartwig, San Francisco; secretary, Malcolm Henderson, Alameda; treasurer, Dorward Henderson, Alameda; recorder, Don Urquhart, Mill Valley.

PENGUIN CLASS PATTER

By Penguin Pete

▶ The Penguin Class plan for local fleets to stage championship series this summer, with prizes sponsored by the national organization, appears to be meeting favor, according to national officers.

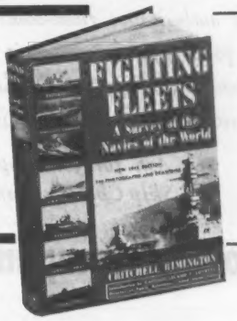
▶ Capt. H. C. Gearing, commanding officer of the San Diego Naval Training Station, has given a trophy to the yacht club fleet. At last report, Ash Bown and his wife Ruth had won two races for the cup, while George Jessop, with Ed Peterson as crew, won one. The trophy will be competed for through the summer.

Pre-race parties held at San Diego Y.C. the third Saturday of each month (the day before the Naval Training Station skippers come over to race) have proved so popular that the Kettenburg Pacific Coast Class fleet has asked to have a joint party of Penguin and PC owners.

Joe Jessop, race committee chairman for the San Diego Penguins, is reported preparing a bid for the Penguin national regatta to be held on San Diego Bay the first year after the close of the war. The group, in fact, has formed a "post-war" yachting committee to boom the bay when the shooting is over. It's composed of Stanley Burne, Capt. Robert Baker and D. W. Campbell.

▶ Here, in part, is the racing calendar for the San Diego Penguins:
June 13 — Penguins' Shelter Island Series, 2nd race;
June 20 — Gearing Trophy race with Naval Training Station Penguins;
July 4 — Penguin race at Coronado Y.C.;
July 18 — Gearing Trophy race with Naval Training Station;
August 1 — Penguins' Shelter Island Series, 3rd race;
August 8 — Penguin race from Coronado to San Diego;
August 15 — Gearing Trophy race with NTS;
August 29 — Third race of special Penguin series;
November 28 — Beginning of winter series.

Everything the yachtsman and naval officer want to know about ALL the navies of the world!



1943 EDITION
Completely Revised and Enlarged, with 340 photographs and drawings

FIGHTING FLEETS

By Critchell Rimington

With an Introduction by
CAPTAIN LELAND P. LOVETTE
Director of Public Relations, USN

Here is an up-to-the-minute, popular-priced presentation in pictures and text of the world's navies, both Allied and Axis, written by an Assistant Editor of *Yachting*. It contains over 300 photographs of all types of ships, in addition to many drawings of armament details, cross-sections of specialized craft, charts of battle formation and aerial attack, the history, development and battle performance of different ships, etc.

FIGHTING FLEETS of 1943 includes:

Tables showing the relative strength of various naval powers.

The Naval Annual, an important new feature containing articles on the year's highlights by outstanding naval authorities.

Special Chapters on the United States Coast Guard and on *all* types of U. S. naval planes, etc.

This book answers every question on every type from the new "Iowa" class battleships and DE's to the S-type submarines now out of service.

At all bookstores · $4.50

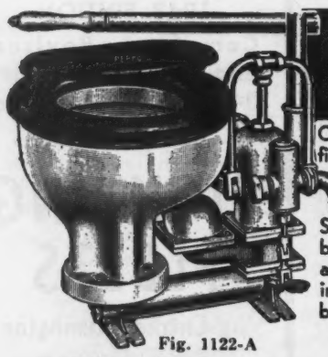
DODD, MEAD
432 4th Ave., New York

FREE! AT SHIP CHANDLERS AND MARINE SUPPLY DEALERS

"The Anchoring Handbook" is a *complete and authoritative guide-book on anchoring problems and techniques.* 28 pages, fully illustrated, it tells how to figure holding power and choose anchorage... determine size of anchor for your boat... gives merits of rope vs chain. Plus many other tips for safer anchoring.

Ask for your copy today. Free *at leading Ship Chandlers and Marine Supply Dealers.*

Northill Company, Inc. Subsidiary of The Garrett Corporation LOS ANGELES, CALIFORNIA



APPROVED "COAST GUARD" CLOSET

Cast Bronze 3½" Pump, white finish, vertical chrome plate heavy brass tube handle. foot valve, oak seat. Side to side 20¼"; front to back 16½"; height 17"; waste arm has ¾" pipe size opening with clean out plugs on both ends.

Fig. 1122-A

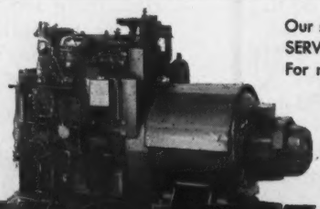
Write for information and prices.

PERKINS MARINE LAMP & HARDWARE CORP.
1944 PITKIN AVE. BROOKLYN, N. Y.

for Complete Dependability

HAZARD WIRE ROPE & FITTINGS

HAZARD WIRE ROPE DIVISION
AMERICAN CHAIN & CABLE COMPANY, Inc.
Marine Department • 230 Park Avenue • New York City



2, 4 and 6 Cylinder Models—5 KW to 94 KVA. Also gasoline units starting at 500 watts.

Our slogan, "U. S. PRODUCTS MUST GIVE SERVICE" means more today than ever. For now, U. S. Electric Plants are in vital service on the battle fronts throughout the world.

U. S. MOTORS CORP.
Oshkosh, Wis.

U.S. DIESEL
MARINE ELECTRIC PLANTS

NEWS OF THE INDUSTRY

Addison F. Vars, President of Sterling Engine Co., and distinguished guests display the newly-won Army-Navy "E" award. Left to right, Lt. Com. Russell J. Roberts, USN; Engineer Rear Admiral H. A. Sheridan, RN, of the British Admiralty Technical Mission; Lt. Com. Hugh E. Wear, USN; Captain John Spinning Phillips, USN; Commander E. H. Thiele, USN; Mr. Vars; Lt. Com. G. T. Applegate, USN; Captain G. W. Cairnes, USN; Com. W. J. Daley, USN

STERLING RECEIVES ARMY-NAVY "E"

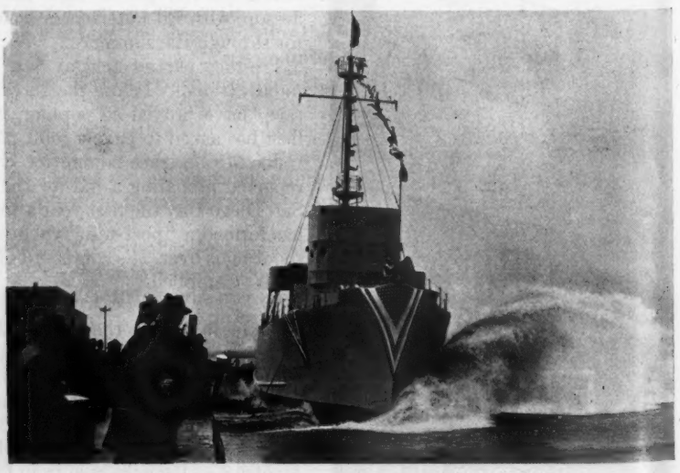
▶ A new high water mark of both color and enthusiasm was reached at the ceremonies attending the presentation of the Army-Navy "E" to the Sterling Engine Co. of Buffalo. Preceded by a luncheon for the many guests given by Addison F. Vars, president of the company, a conducted tour of the company's two plants was followed by the presentation, at which Frank G. Raichle, secretary of the company, served as Master of Ceremonies. Presentation of the Army-Navy "E" was made by Captain John Spinning Phillips, USN, famous skipper of the tanker *Neosho*, which is affectionately known in naval circles as the "Fat Girl." Said Captain Phillips: "Today, Sterling Engines are serving in small craft of the Navy and Coast Guard in many farflung areas of operation. They are meeting the stiffest and most gruelling tests which are an inevitable part of wartime operations. . . . I am here because these engines have passed every test." In accepting the "E" flag, Mr. Vars replied that: "in accepting this high award, you can rely on us to do all in our power to keep the Army-Navy 'E' flying!"

PARAGON OFFERS REPRODUCTION

▶ A reproduction of the Paragon advertisement which appears on the inside back cover of this issue — in full color, without advertising, and suitable for framing — will be sent gratis to anyone writing to Paragon Gear Works, Inc., Taunton, Mass.

NEW TYPE OF PATROL VESSEL LAUNCHED BY PULLMAN-STANDARD CAR

▶ The first of a new type of submarine patrol vessel was recently launched at the Chicago yard of the Pullman-Standard Car Manufacturing Co. Described by Commander Eugene E. Paro, naval hero who participated in the launching ceremonies as one of a group of "busy shepherd dogs of the sea," these vessels are the eleventh major item of armament being manufactured by these well-known builders of railroad cars.



The first naval patrol vessel built in Chicago hits the water at the yards of Pullman-Standard Car Manufacturing Co.

PENN YAN BOATS

BACKED BY THE REPUTATION OF TWO GENERATIONS OF MASTER BOAT BUILDERS

OUTBOARDS INCL. FAMOUS "CARTOP"

CANOES

INBOARDS

SAIL-BOATS

DINGHIES

FREE CATALOG: 40 pages completely describing and illustrating the world's greatest line of small watercraft—wide choice still available despite large commitments to the armed forces.

PENN YAN BOATS Inc., 18th St. Penn Yan, N. Y.

ATTWOOD

Custom Styled Marine Hardware

Our facilities are completely assigned to the War effort. Complete sets of fittings and deck hardware are available in both galvanized iron and bronze for landing boats, crash boats, picket boats and a large number of others.

Send Us Your Inquiries

ATTWOOD BRASS WORKS, INC.

GRAND RAPIDS, MICHIGAN

SEARCHLIGHTS

Electric Searchlights for all sizes of boats

The Carlisle & Finch Co.

249 E. Clifton Ave., Cincinnati, Ohio

For Pleasure Craft

A limited supply of

REGATTA

Topside and Bottom Paints still available

ALL TYPES OF

For Fighting Craft

NAVY
ARMY
Coast Guard

Inquiries for specification paints given immediate attention

BALTIMORE COPPER PAINT CO.

OLIVER REEDER & SON, INC., PROPRIETORS

KEY HIGHWAY, BALTIMORE, MD. ESTABLISHED 1870 74 BRIDGE STREET, NEW YORK, N.Y.

"Yachting's" Advertisers

In This June 1943, Issue

Aerial Products, Inc. 57
Alden, John G. 8
American Brass Co. 77
American Car & Foundry Co. 75
American Chain & Cable Co., Inc. 116
American Engineering Co. .. 111
American Pad & Textile Co. . 72
Amory Distributor Inc., C. P. 10
Annapolis Yacht Yard, Inc. . 61
Atlantic Mutual Insurance Co. 100
Attwood Brass Co. 117

Baltimore Copper Paint Co. 117
Bliven & Co., Chas. W. 11
Bludworth, Inc. 112, 113
Books 11, 106, 111, 115
Bowes, Thos. D. 11
Breidert & Co., G. C. 98
Burger Boat Co. 92

Camden Shipbuilding & Marine Railway Co. 86
Carlisle & Finch Co., The .. 117
Casey Boat Building Co., Inc. 103
Century Boat Co. 83
Champion Spark Plug Co. 55
Chelsea Clock Co. 115
Chemical Products Corp. 112
Chris-Craft Corp. 91
Chubb & Son 66
Cleveland Diesel Engine Div. 2–3
Columbian Bronze Corp. 101
Conklin, T. E., Co. 97
Consolidated Shipbuilding Co. 69
Cox & Stevens, Inc. 9
Cummins Engine Co. 113
Cuprinol, Inc. 102

Danforth, R. S. 101
Degrauw, Aymar & Co. 111
Dodd, Mead & Co. 115
Dunphy Boat Corp. 109
Durkee Marine Products Corp. 103

Elco Works 12
Eldredge-McInnis, Inc. 8
Electric Storage Battery Co. 118
Elizabeth City Shipyard 96
Evinrude Motors 79

Federal-Mogul Corp. 17
Ferdinand, L. W. 106
Fisher Boat Works 82
Foster Boat Co. 15

Gardner & Co., Wm. 11
General Motors Corp. 2–3
Gibbs Gas Engine Co. 84
Gielow, Inc. 9
Goodrich Co., B. F. 14
Gray Marine Motor Co. 64, 65
Grebe, Henry C. & Co., Inc. 95
Greenport Basin & Constr. Co., Inc. 98
Gulf Oil Corp. 73

Hallicrafters, Inc. 92
Hall-Scott Motor Car Co. .. 75
Hamilton Watch Co. 94
Hansen, C. A. 10
Harbor Boat Bldg., Co. 60
Harper Co. H. M. 63
Haskelite Mfg. Co. 56
Hazard Wire Rope Div. 116
Higgins Industries Inc. 7

Ipik Company 4

Jacob, Inc., Robert 78
Jakobson Shipyard, Inc. 1
John & Assoc., Inc., Wm. Edgar 102

Kelvin & W. O. White Co. 101
Kenyon Instrument Co. 115
Kermath Mfg. Co. 93
Kidde & Co., Walter 90
Kuhls, H. B. Fred 113

LaBour Company, Inc., The. 107
Lalance & Grosjean Mfg. Co. 105
Liquidometer Corp. 104
Lyman Boat Works 109

Mack Mfg. Corp. 114
Marine Office of America ... 113
Marine Products Co. 99
Matthews Co., The 99
McLachlan Co., Inc., F. S. 107

Northill Co. 116
Norton, W. W., Co. 111

Onan & Sons, D. W. 96
Owens Yacht Co. 76

Packard Motor Car Co. 71
Panish Controls 82
Paragon Gear Works, Inc. 3rd Cover
Penn Yan Boats 117
Perkins Marine Lamp & Hdwe. Co. 116
Peterson Boat Works 112
Pettit Paint Co., Inc. 88
Peyton Co., The 74
Post & Son, F. G. 9

Quincy Adams Yacht Yard, Inc. 100

Ratsey & Lapthorn, Inc. 112
Red Wing Motor Co. 68
Richardson Boat Co. 67
Roach, Charles D. 11
Robinson Marine Constr. Co., Inc. 114
Roth Bros. Chronometer Co. 111
Rumford Marine Finishes .. 112

Sample, Frank L., Jr., Inc. .. 5
Schieffelin & Co. 105
Schwarze Electric Co. 81
Scott & Co., Inc., Palmer ... 70
Scripps Motor Co. 59
Smith, Edward & Co. 70
Snow-Nabstedt Gear Corp. . 108
South Coast Co. 62
Sparkman & Stephens, Inc. ... 8
Sperry Gyroscope Co. 87
Sperry Shoe Co. 114
Stadium Yacht Basin, Inc. 106
Sterling Engine Co. ..... 4th Cover
Stewart-Warner Corp. 89
Sturgeon Bay Boat Works .. 108
Swap Chest 11

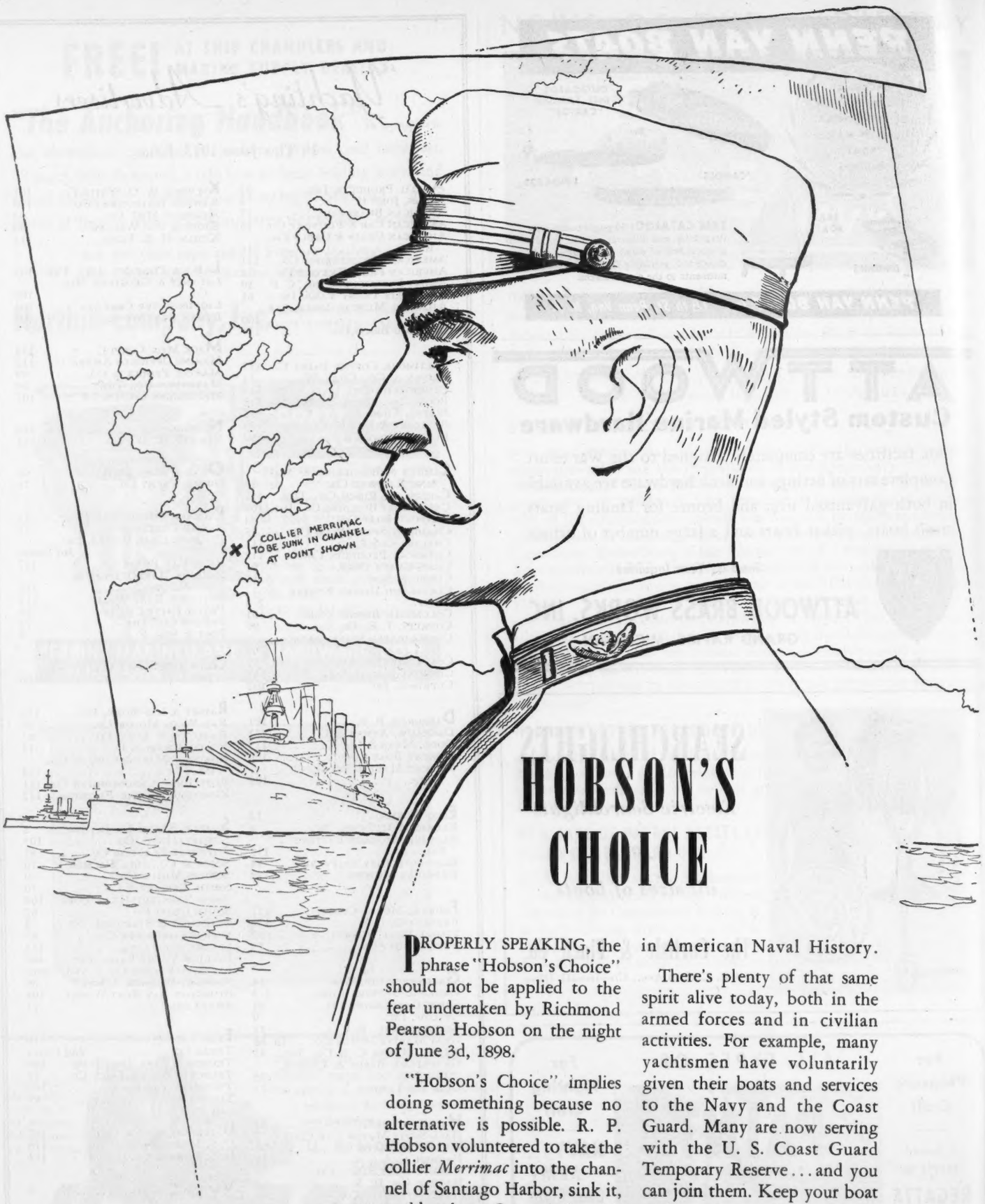
Tams, Inc. 10
Texas Co. ..... 2nd Cover
Trumpy & Sons, Inc., John ... 108
Truscott Boat & Dock Co. ... 58
Twin Disc Clutch Co. 101
Turner's 99

Universal Motor Co. 107
U. S. Motor Corp. 116
U. S. Rubber Co. 114

Vacuum Can Co. 6

Weems System of Navigation 110
Wells, Inc., John H. 10
Wheeler Shipyard, Inc. 85
Wilcox, Crittenden & Co., Inc. 109
Winner Mfg. Co. 80

Yacht Brokers 8–11
Yacht Sales & Service, Inc. .. 9



HOBSON'S CHOICE

PROPERLY SPEAKING, the phrase "Hobson's Choice" should not be applied to the feat undertaken by Richmond Pearson Hobson on the night of June 3d, 1898.

"Hobson's Choice" implies doing something because no alternative is possible. R. P. Hobson volunteered to take the collier *Merrimac* into the channel of Santiago Harbor, sink it, and bottle up Cervera's Spanish fleet. He wasn't *forced* to do it. Only his strong sense of duty compelled him to undertake one of the most daring ventures in American Naval History.

There's plenty of that same spirit alive today, both in the armed forces and in civilian activities. For example, many yachtsmen have voluntarily given their boats and services to the Navy and the Coast Guard. Many are now serving with the U. S. Coast Guard Temporary Reserve . . . and you can join them. Keep your boat and equipment ship-shape. Obey the rules for wartime operation of private craft...and remember . . . War Bonds help the Navy, too.

Exide
BATTERIES

THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia
Exide Batteries of Canada, Limited, Toronto

PRINTED IN THE U. S. A. BY
RUMFORD PRESS
CONCORD, N. H.

what do you see, soldier?

Look beyond this flaming horizon, soldier. Look past the red haze of battle to brighter days ahead. What do you see? After victory—what?

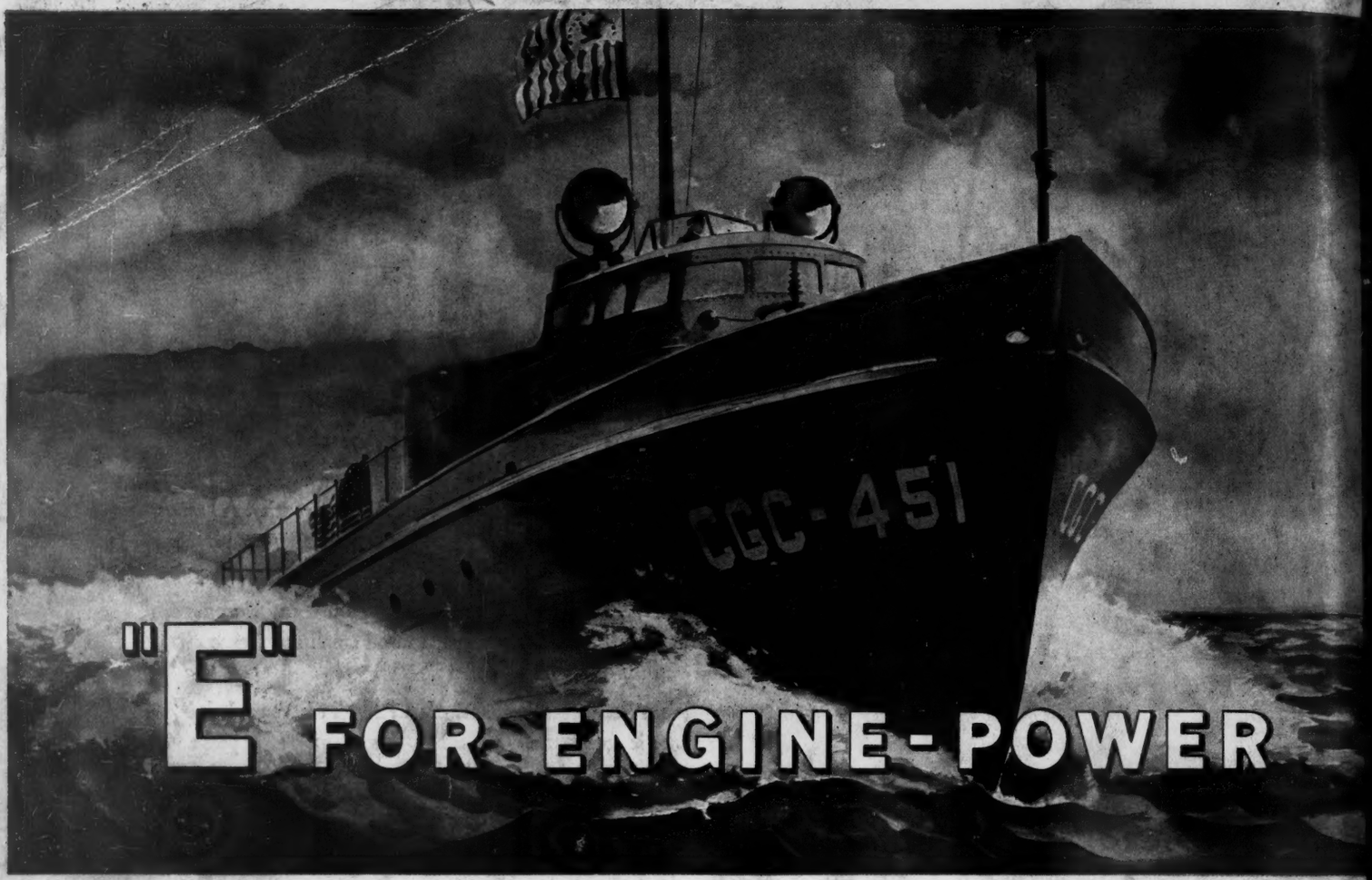
Peace, yes. And reconstruction. A job. Security. A home with that girl. And happy, smudge-nosed youngsters playing in the yard. All this you see—and more.

You see freedom. Freedom for American, European, Russian and Asiatic. For big man and small man, executive and worker. Universal freedom.

It's a fine dream, soldier. You and all of us are helping to make it come true. This time we won't stop after you and your fighting, high-hearted buddies smash forward to victory by land and sea and air. This time your sacrifices must earn *lasting* security. That's what you see, soldier. And God willing, that's what you shall have.

PARAGON GEAR WORKS, INC.
TAUNTON, MASSACHUSETTS

TRANSMISSIONS FOR MARINE INTERNAL COMBUSTION ENGINES



Sterling Powered Coast Guard Patrol Boat

Sure, we're proud of our bright new Army-Navy "E" flag. But this isn't any time for bragging.

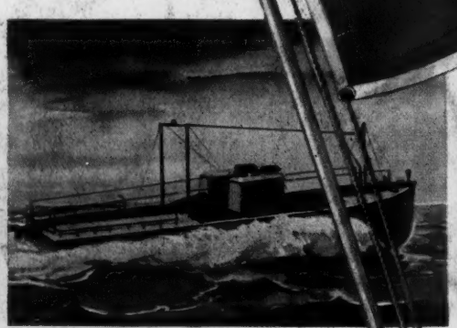
To us, "E" stands for Engine power. We know something about how much engine power is needed for victory in mechanized war. We've made a pretty good start on the enormous job we have to do.

One of the major quality producers of marine engines before the war, we were asked to boost production to about *fifty times* our pre-war level.

For tough wartime assignments, these engines had to measure up to new high standards of performance never approached by pre-war engines.

Both jobs will be done—are being done. We thought you might like to know.

Sterling Powered Army Aircraft Rescue Boat



Sterling Powered Navy Bomb Target Boat

Sterling Powered United Nations MTB Boat

STERLING ENGINE Company

BUFFALO, NEW YORK

New York City, 900 Chrysler Building. Washington, D. C., 806 Evans Building.

"KEEP BUYING WAR BONDS"